

IP editing

Arabic, Spanish,
Japanese, Bengali

by mraish / February 2022



Psathyrella ammophila. Photo credit: [Julie Anne Workman](#), CC BY-SA 3.0, via Wikimedia Commons: https://commons.wikimedia.org/wiki/File:Psathyrella_ammophila.jpg

given that:

- [IP edits make up ~25% of all edits](#) in some larger Wikis;
- IP editing has long been [a focus of WMF attention](#), including [from the Growth team](#);
- Many logged-in editors [began via IP](#);
- [IP editors appear to edit differently](#) than logged-in editors;
- The WMF is [actively seeking to improve privacy](#) for “anonymous” editors; and
- [There is an identifiable population](#) of privacy-seeking IP editors;

the WMF Growth team would like to know:

- A. **Why** do different groups of editors choose to edit without logging in?
 - a. **How** are these groups distributed in the communities with which Growth works?
- B. **Which** of these groups might be encouraged to create accounts and edit while logged in, and which groups would be better accommodated as “anonymous” editors?

method



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ウィキペディア
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WIKIPEDIA
La enciclopedia libre

metrics

experts

surveys

interviews

surveys

- Distributed via on-Wiki and off-Wiki networks.
 - Village Pump announcements, individual patrollers, Quicksurvey (Spanish and Arabic), mailing lists, user groups
- A Japanese editor initiated a site notice, resulting in a large number of jawiki responses.

Arabic = 20 (12 self-identified patrollers)

Bengali = 24 (14 patrollers)

Spanish = 52 (19 patrollers)

Japanese = 686 (282 patrollers)

interviews

- 2-4 conversations with local “experts” prior to survey deployment.
- 6-8 interviews in each study Wiki:
 - *Background in movement*
 - *Community dynamics*
 - *Patrolling activities*
 - *Local conceptions of privacy and anonymity*
 - *Perceptions of vandalism*
 - *Personal experiences with IP editing—as editor or patroller*
- Current and former IP editors reached in Arabic, Spanish, and Bengali.

العربية

Español

日本語

বাংলা

summaries

casual IP editing

Casual IP editing is widespread and common. Many casual IP editors don't want or need an account to make minor changes, or they prefer not to log in on shared devices. Many casual IP edits come from *potential* new editors who are experimenting and exploring, and who may not know how easy it is to create a Wikipedia account.

strategic IP editing

Strategic IP editors often log out in order to work on specific, controversial topics. Editors' association with these topics may result in unwanted scrutiny from other editors. **Strategic IP editing is highly variable between Wikipedias**—communities that attach higher stakes to editing controversial topics may see more frequent and more visible strategic IP editing.

anonymity

Interviewed editors and the WMF talk about “anonymity” in different ways. For many editors, **editing becomes “anonymous” when it is de-linked from a registered account.** An identifiable edit history is often seen as more sensitive than a disclosed IP address. While IP assignments may be ephemeral and decentralized in many global contexts, a registered editor account is often the product of years of curation, and thus more costly to compromise.

privacy

Privacy and **IP disclosure risks are a new but growing topic of discussion** in these Wikipedias. Interview participants generally agree that newer, *casual* IP editors are typically less aware of privacy risks, while knowledgeable, **strategic IP editors are much more aware of what they disclose**, and often highly conscious of the mechanisms that govern IP assignments in their local contexts.

tools and rules

Tools available to patrollers play a major role in mediating their communities' stance towards IP edits. **Communities with effective, time-saving tools may be more receptive of IP edits** (e.g., **Spanish**), while communities that mandate extra or secondary scrutiny of all IP edits may be more skeptical of IP edits (e.g., **Arabic**).

community stance(s)

The Japanese, Spanish, and Arabic communities have periodically discussed the issue of possible further restrictions on IP editing. (Arabic already has strong limitations in place in the form of *Flagged Revisions* that affects all IP and New Editor edits.) Interviews with experienced editors indicate that **consensus in these communities currently appears to favor the status quo**, i.e., no additional restrictions on IP editing.

pro-IP restriction

The pro-restriction camp points out that most vandalism comes from IP (a view shared by interview participants and survey respondents), and that **IP edits are rarely useful**. Spanish editors also note that English Wikipedia is more restrictive toward IP editing than Spanish.

pro-IP acceptance

The pro-accomodation camp argues that **(further) restricting IP edits would violate the “everyone can edit” ethos**. Supporters note that most IP *editors* are good-faith—even if most IP *edits* are problematic—and that **IP editors are often potential New Editors** who will likely be negatively affected by restrictions.

vandalism

Interviewed and surveyed **patrollers tend to agree that most vandalism comes from IP**, but the severity of IP vandalism is highly debated. The bulk of IP vandalism is often easily identified and reverted, rendering it relatively less serious. The vandalism and abuse perpetrated by knowledgeable, registered editors is generally viewed as more damaging.

low IP visibility

Good-faith IP editing is low-visibility, but high-impact. Many interview participants view IP editing as a major source of minor, corrective edits. Among these four Wikipedias, the constructive role of IP edits is somewhat less clear in Arabic, which subjects IP edits to pre-publication scrutiny. Some argue that good-faith IP editing is an indicator of Wikipedia’s societal cachet—more people exploring Wikipedia indicates that more people know about it.

العربية

community

- Relatively *skeptical* of IP editing.
- **Flagged Revisions** ensures that each IP edit requires extra work from patrollers.
- The Arabic community values personal relationships—**editor identifiability is important to editor legitimacy**.

IP editors

- **Casual** IP editors often make minor corrective edits which are often reverted.
- **Strategic** IP editors log out of their accounts specifically to edit controversial topics.
- These editors seek to maintain relationships in the community and avoid harassment.

implications

- Perceived IP editing risks come from other editors, rather than from disclosed IP addresses.
- “Anonymous editing” means de-linking editing activity from edit histories.
- Negative reception of good-faith IP edits is a barrier to *potential* new editors.

Español

- Relatively *accepting* of IP editing.
- **Effective tools** greatly reduce the damage caused by IP vandals.
- IP vandalism is an “annoyance” rather than a serious threat.
- The community generally seems to favor accommodating IP contributions.

- **Casual** IP editing is incentivized by digital infrastructure gaps.
- Bad-faith IP editors are restricted in the damage they can do by effective tools.
- Vandalism to Wikidata, however, is accessible to editors of all devices and experience levels.

- Anonymity is minor but growing topic of concern in Spanish.
- **Casual** IP editors are a potential source of growth, but many don’t know how easy account creation is, or aren’t interested in account benefits.
- Negative reception of good-faith IP edits is a barrier to *potential* new editors.

日本語

community

- Relatively **accepting** of IP editing.
- Editors often describe a relatively antagonistic logged-in community dynamic.
- In spite of IP abundance, logged-in editors are often suspicious of IP editors.
- Most vandalism is agreed to come from IP.

IP editors

- **IP editors are often motivated to avoid conflict** and disputes above all else.
- Less experienced editors are often wary of identifiability in online communities.
- Many Japanese editors aim to disclose as little information online as possible.
- Log in for minor edits; log out for major.

implications

- Japanese editors describe a culture of valuing anonymous volunteerism.
- Past abuse—or the perceived likelihood of future abuse—incentivizes IP editing.
- WMF may explore ways to support the apparently large community of committed logged out and semi-logged out editors.

বাংলা

- Relatively **accepting** of IP editing.
- bnwiki is a comparatively small community—interviewed editors recognize that IP edits often represent the work of *potential* new members.
- Effective tools mitigate vandalism damage.
- bnwiki editors often begin editing English.

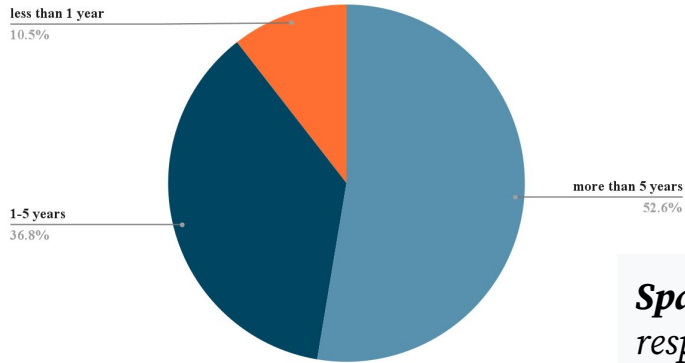
- Interview participants report observing a mix of **casual** and **strategic IP editing**.
- **Casual** IP editing is accepted and has several socio-technological motivations.
- IP editors are known to create valuable new pages.
- IP editors are regarded as unaware of privacy concerns.

- Bengali editors sometimes face **linguistic challenges**—the “correct” Bengali used on Wikipedia diverges from the language of social media or other sites.
- Privacy is a new, but growing concern.
- Interview participants are uncomfortable with forcing log-in, but optimistic about IP masking.

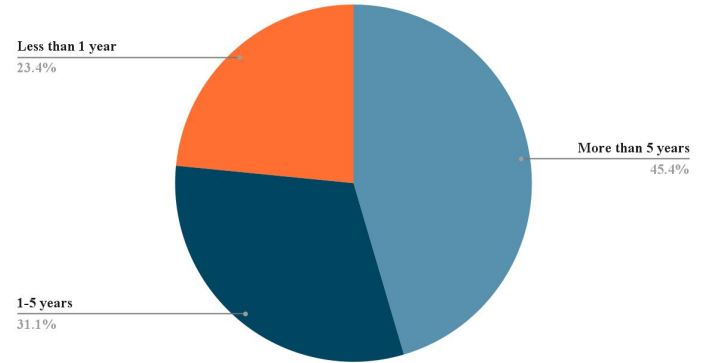
who did the survey reach?

How long have you been editing [this language] Wikipedia?

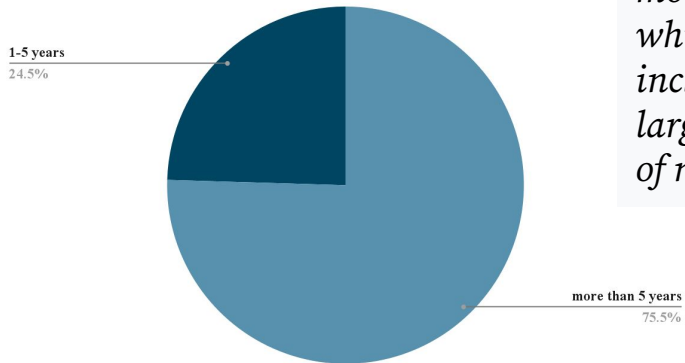
Arabic (19)



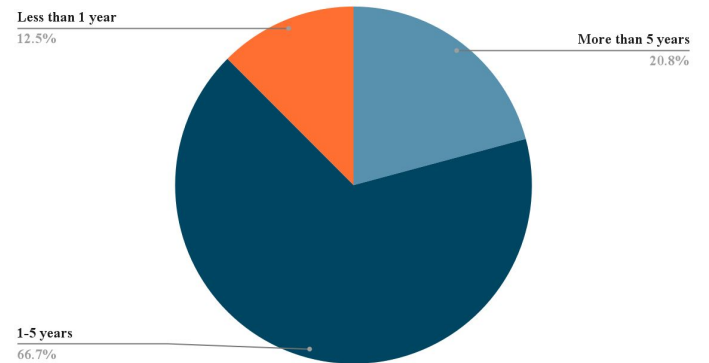
Japanese (691)



Spanish (53)



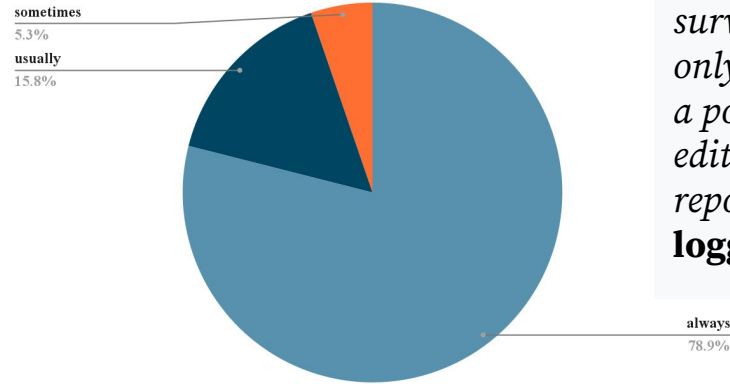
Bengali (24)



Spanish respondents were relatively the most experienced, while Japanese included the largest proportion of newer editors.

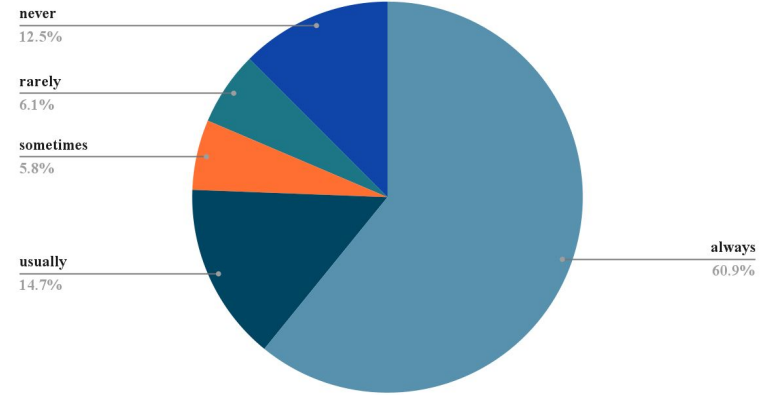
How often do you log in to your account when editing?

Arabic (19)

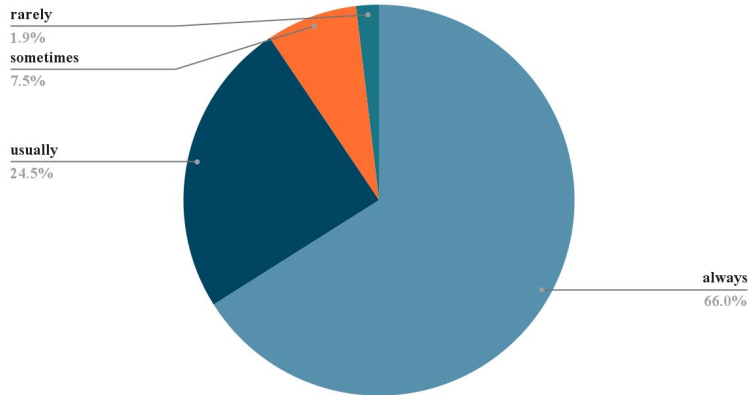


*The Japanese survey was the only one to reach a population of editors who report **never** logging in.*

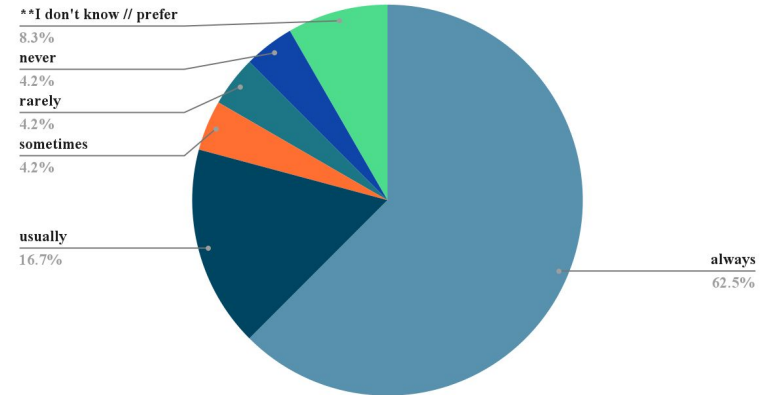
Japanese (672)



Spanish (53)

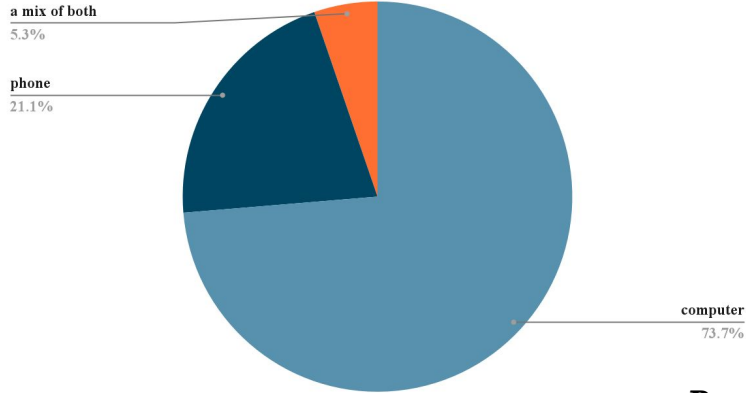


Bengali (24)

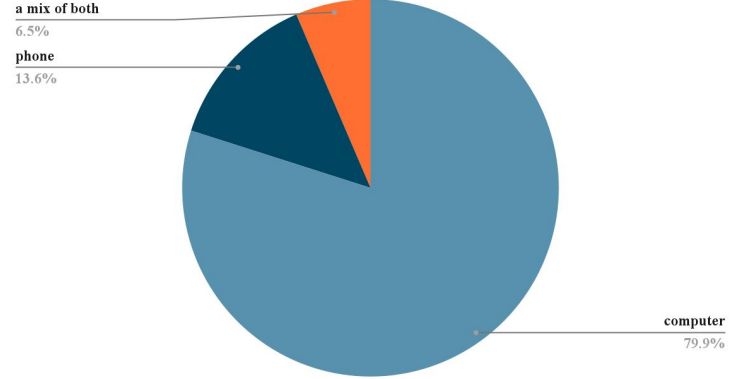


Do you usually edit Wikipedia from a phone, or a computer?

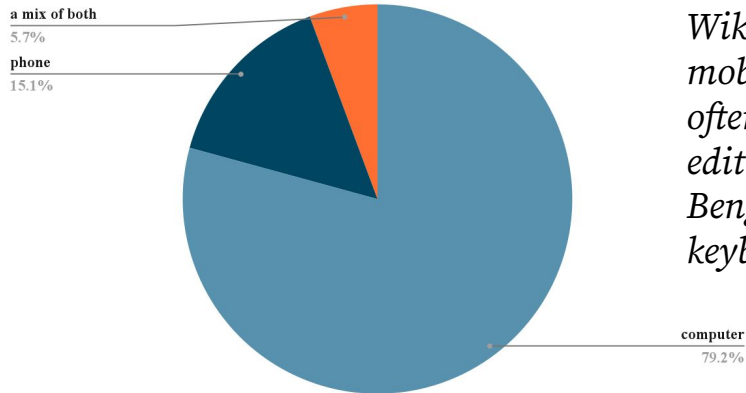
Arabic (19)



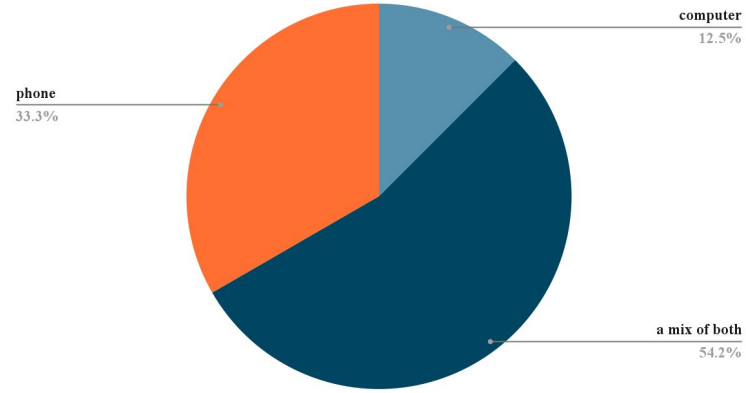
Japanese (682)



Spanish (53)



Bengali (24)



Bengali is a mobile-heavy Wikipedia, and mobile devices often feature editors' preferred Bengali keyboards/fonts.

a spectrum of IP acceptance

Wikipedias vary in their rate of IP contributions

From a lot (Japanese) to a little (Arabic)

- IP edits always make up a larger contribution to *mobile* than they do *desktop* edits.
- **Japanese** has the highest rate of IP contribution to both *content* and *non-content* pages, followed by **Spanish**.
- **Arabic** has the lowest rate of IP contribution in every category.
 - Arabic has policies in place that restrict IP contributions.

Ratio of unreverted IP edits to unreverted logged in, non-bot edits

	<i>%IP (total)</i>	<i>%IP (mobile)</i>	<i>%IP (desk.)</i>	<i>%IP (non-content)</i>
ja	26.3%	37.5%	22.7%	11.0%
es	20.0%	43.9%	14.7%	6.0%
bn	9.4%	16.2%	5.4%	2.1%
ar	5.0%	17.1%	2.2%	1.7%

Percentages represent average monthly number of unreverted IP edits divided by average monthly number of unreverted, logged-in non-bot edits for the year 5/2020-5/2021.

Wikipedias vary in their rate of IP reversion

From relaxed (Japanese) to constant (Arabic).

- *Mobile* IP edits are the most frequently reverted.
- **Japanese** reverts IP the least frequently, while **Arabic** is the strictest.
- **Bengali** has a relatively low IP reversion rate, but a low overall IP contribution (9% of non-bot edits).
- **Spanish** reverts *mobile* and *desktop* IP edits at similar rates.

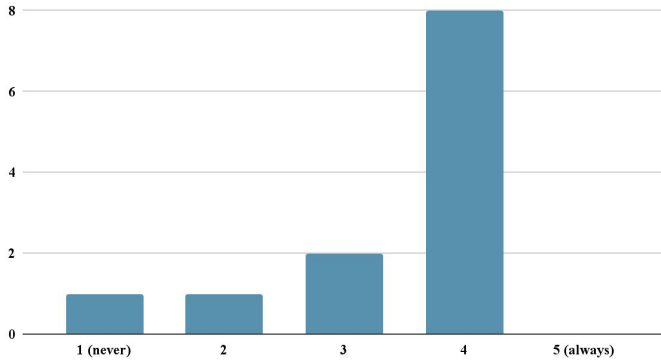
Revert rates by platform

	<i>IP mob. web</i>	<i>IP mob.</i>	<i>IP desk.</i>	<i>IP total</i>
ja	.23	.22	.08	.13
bn	.35	.34	.15	.26
es	1.16	1.14	.73	.89
ar	2.94	2.85	1.21	2.27

Revert rates represent the average number of monthly reverted edits divided by the number of unreverted edits for the period 5/2020-5-2021.

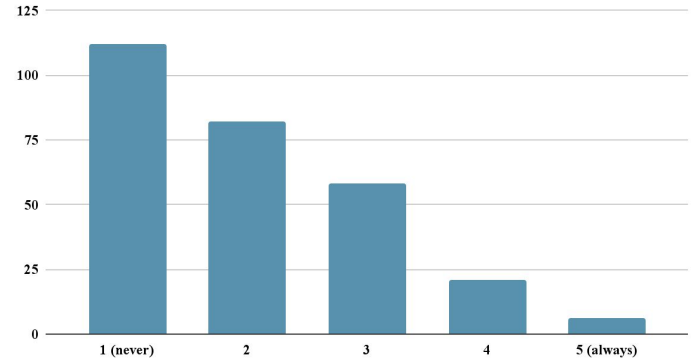
How often do you revert IP edits when you see them?

Arabic (12)

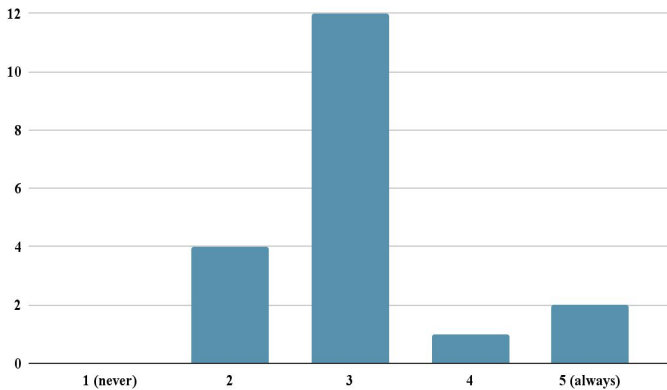


*Surveyed patrollers corroborate metrics: **Arabic** reverts IP more frequently; **Japanese** reverts less frequently.*

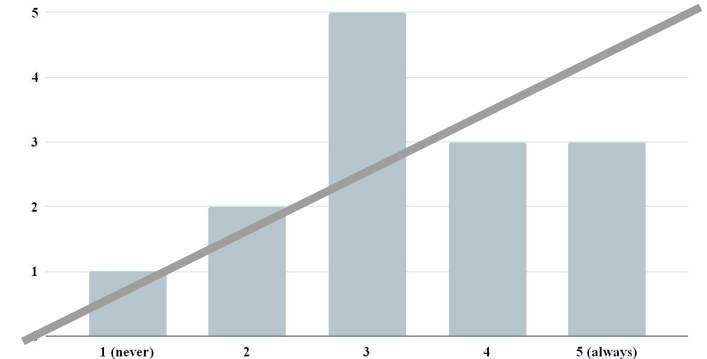
Japanese (279)



Spanish (19)



Bengali (14)





If you edit as IP on Arabic Wikipedia, you'll be reverted with no notification of why it was reverted.

...

If I started now, I'd create an account because now in 2021, no matter how simple or good [my IP edit] is, an admin will immediately revert it.

- interviewed Arabic editors

Auricularia auricula-judae. Photo credit: [Dominicus Iohannes Bergsma](#), CC BY 4.0, via Wikimedia Commons:
[https://commons.wikimedia.org/wiki/File:Echt_judasoor_\(Auricularia_auricula-judae,_synoniem,_Hirneola_auricula-judae\).Locatie,_Natuurterrein_De_Famberhorst_03.jpg](https://commons.wikimedia.org/wiki/File:Echt_judasoor_(Auricularia_auricula-judae,_synoniem,_Hirneola_auricula-judae).Locatie,_Natuurterrein_De_Famberhorst_03.jpg)



WIKIMEDIA
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IP editors are reverted more than New Editors (except for jawiki)

- **Japanese** is the only study wiki to revert NE more frequently than IP.
- **Arabic** reverts both IP and NE at the highest rates, but IP is reverted much more.
- *Mobile* is the most frequently reverted platform for both groups, and *desktop* is the least.

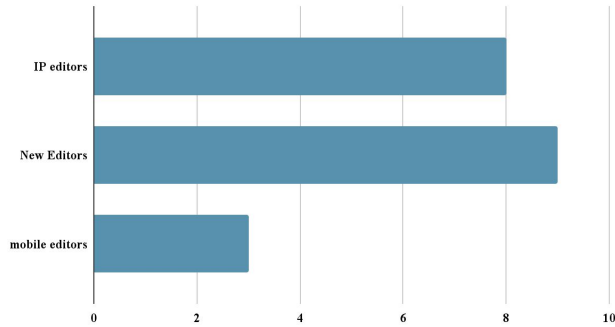
IP vs New Editor revert rates

	<i>NE mob. web</i>	<i>IP mob. web</i>	<i>NE mob.</i>	<i>IP mob.</i>	<i>NE desk.</i>	<i>IP desk.</i>	<i>NE total</i>	<i>IP total</i>
ja	.25	.23	.24	.22	.14	.08	.18	.13
es	.66	.116	.65	.114	.35	.73	.43	.89
bn	.20	.35	.20	.34	.08	.15	.14	.26
ar	1.26	2.94	1.27	2.85	.22	1.21	.59	2.27

New Editors edits were made by accounts with an account age of 0-30 days. Rates presented here represent average monthly edits and reversions made during the period 5/2020-5/2021.

What groups do you pay the most attention to when patrolling?

Arabic (11)



Patrollers report similar scrutiny of IP and New Editors.

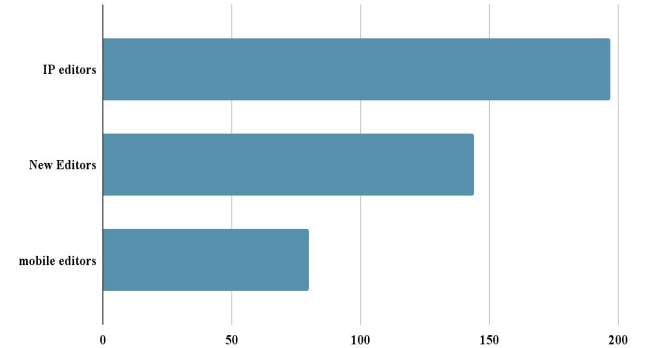
...

NEs are typically reverted less frequently than IP (except in Japanese).

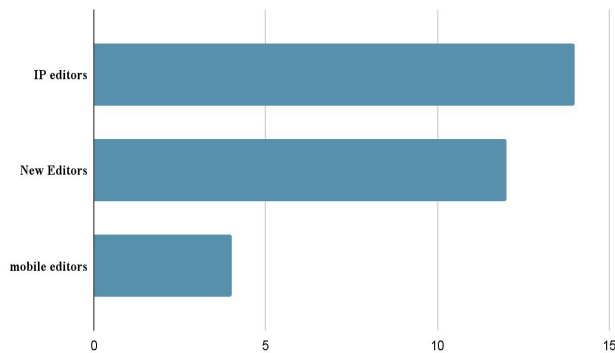
...

Patrollers report less scrutiny of mobile editors, although mobile is reverted more than desktop.

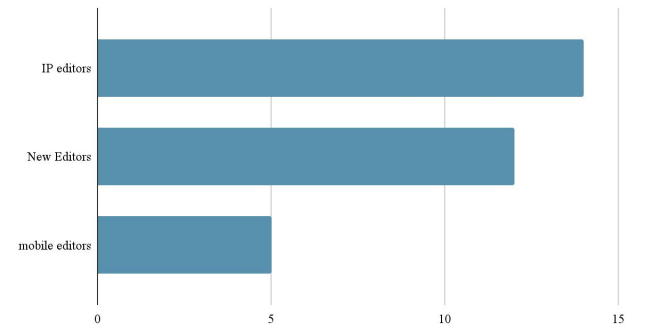
Japanese (225)



Spanish (15)



Bengali (14)



differences^(t-test)

- Self-identified patrollers^(n = 327; M = 2.65) find it **less important** than non-patrollers^(n = 454; M = 3.16) that their IP address remain hidden. $t(709.54) = 5.60^{***}$
- Patrollers^(n = 324; M = 2.71) find it **less important** than non-patrollers^(n = 454; M = 3.06) that people can edit Wikipedia without logging in. $t(652.17) = 3.23^{***}$

correlations^(Spearman)

- The more frequently respondents log in, the less important it is that others can edit Wikipedia without logging in. $(rho = -.39^{***})$
- The more revealing respondents consider their IP address, the more important it is that their IP address remain hidden from others online. $(rho = .31^{***})$

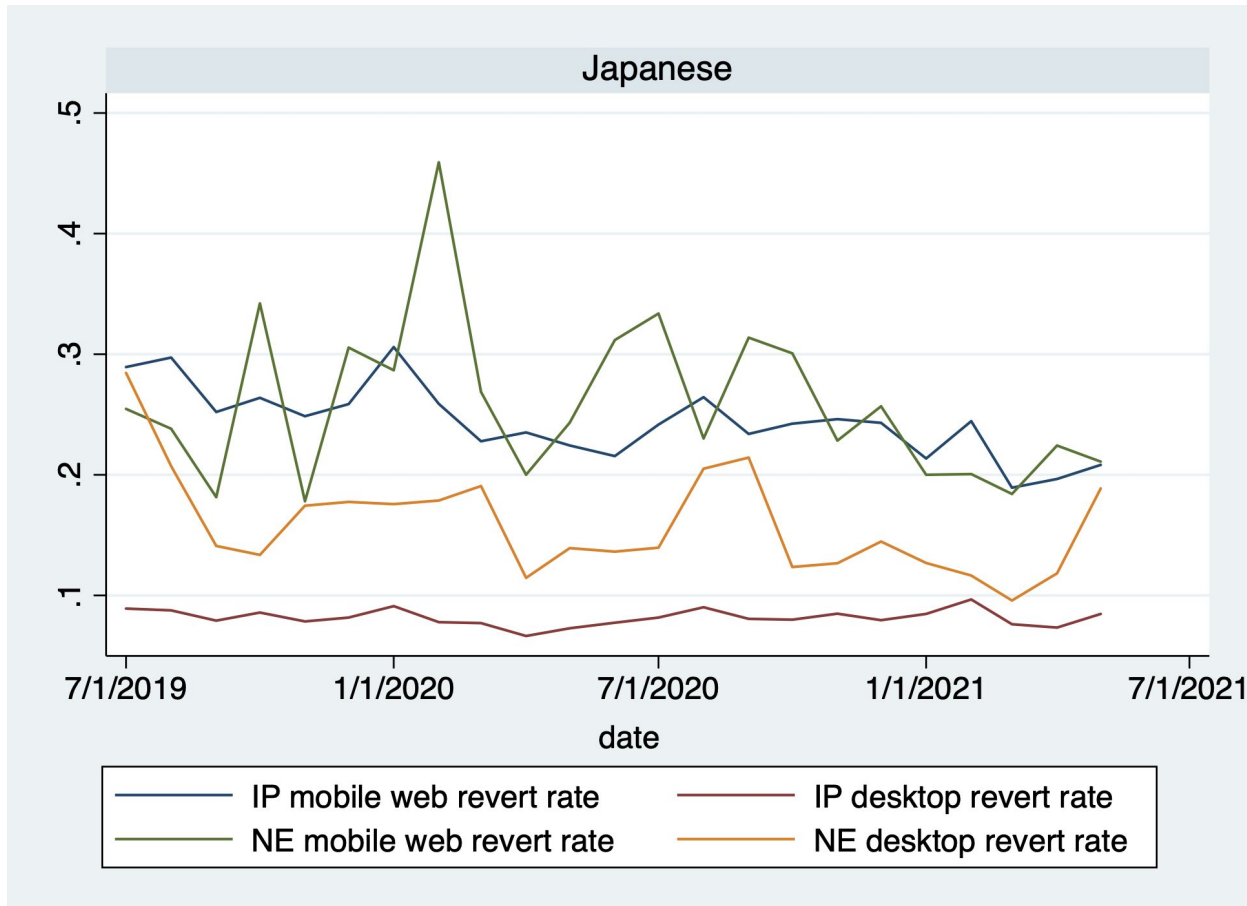
causalities^(regression): **How important is it that your IP address remains hidden from others on the internet?**

- Ratings are **positively affected** by:
 - *login frequency* (coef. = .18, z = 3.17**)
 - being a *patroller* (coef. = .53, z = 3.61***)
 - *IP risk*, i.e., how revealing is your IP address? (coef. = .55, z = 9.39***)
- Ratings are **negatively affected** by:
 - *Editor tenure*, i.e., editing <1 year is associated with higher ratings than editing 5+ years. (coef. = -.33, z = -3.56***)
- **No significant effect** found for *editing device*, *Wikipedia language* (ar, bn, ja, or es), or reported *importance of being able to edit WP without logging in*.

Coefficients represent a significant ordered logistic regression model testing the effect of the above variables on IP privacy importance (1 = not important at all, 2, 3, 4, 5 = extremely important); pseudo R² = .055***)

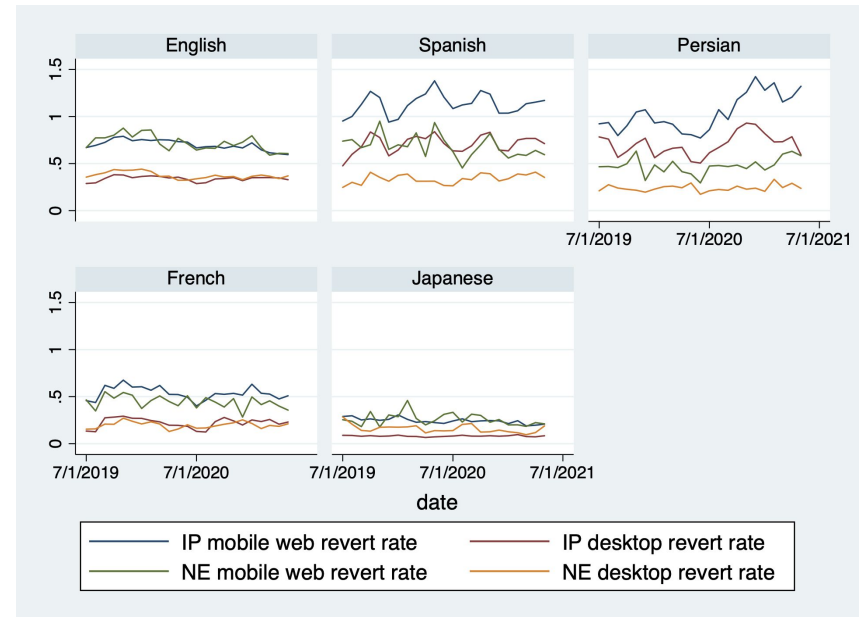
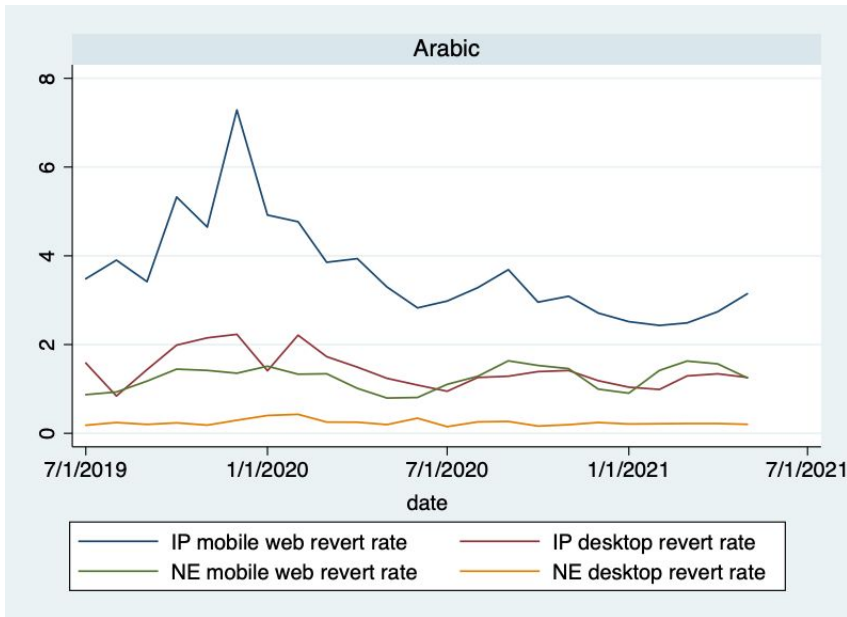
spectrum	Proportion IP edits				Revert rates								MR
	<i>%IP (total)</i>	<i>%IP (mobile)</i>	<i>%IP (desk.)</i>	<i>%IP (Talk)</i>	<i>NE mob. web</i>	<i>IP mob. web</i>	<i>NE mob.</i>	<i>IP mob.</i>	<i>NE desk.</i>	<i>IP desk.</i>	<i>NE total</i>	<i>IP total</i>	
ja	26.3%	37.5%	22.7%	11.0%	24.9%	22.8%	24.2%	22.3%	14.4%	8.2%	17.6%	13.0%	
es	20.0%	43.9%	14.7%	6.0%	65.5%	115.7%	64.8%	113.6%	34.6%	72.5%	43.0%	88.8%	
ru	18.5%	49.5%	15.6%	10.9%	53.5%	77.2%	53.3%	75.1%	15.0%	24.6%	23.2%	35.9%	
en	17.5%	41.7%	13.8%	3.5%	68.3%	66.8%	67.3%	64.7%	35.2%	33.4%	42.8%	43.3%	
fa	13.0%	32.2%	3.9%	1.7%	48.4%	112.8%	48.4%	112.1%	24.3%	72.5%	36.8%	103.9%	
fr	12.6%	51.6%	8.8%	1.8%	42.3%	51.3%	30.2%	49.5%	19.4%	21.3%	22.7%	31.5%	
nl	12.0%	48.9%	9.4%	2.4%	42.4%	73.3%	49.0%	69.0%	19.4%	46.2%	22.9%	52.2%	
pl	11.7%	37.2%	10.1%	9.7%	66.6%	89.1%	65.6%	86.6%	19.0%	38.6%	26.6%	47.8%	
cs	10.5%	45.7%	2.9%	3.6%	48.4%	85.0%	47.0%	81.1%	10.9%	34.2%	14.6%	45.1%	
pt	9.0%	21.1%	6.4%	1.7%	71.9%	68.0%	71.3%	67.3%	29.2%	38.2%	42.7%	50.2%	
bn	9.4%	16.2%	5.4%	2.1%	20.0%	34.6%	20.1%	33.6%	8.2%	15.3%	14.0%	26.3%	
tr	7.7%	19.6%	5.9%	2.2%	72.5%	135.0%	72.5%	119.7%	17.3%	45.2%	32.5%	69.6%	
ar	5.0%	17.1%	2.2%	1.7%	126.0%	293.5%	126.6%	285.3%	22.2%	121.1%	58.8%	227.3%	

Japanese alone reverts New Editors (slightly) more than IP



revert rates by platform

- IP edits are reverted more often than New Editor edits.
- Mobile edits are reverted more frequently than desktop edits.



RIGHT: Breakdown of topics worked on by IP editors. Percentages represent the total number of edits for a given category divided by the four-category total for each target Wiki. Data was collected [via Superset](#) and represents the year period between 06/2020-06/2021.

	<i>Culture</i>	<i>Geography</i>	<i>History and Society</i>	<i>STEM</i>
<i>ar</i>	41.8%	42.6%	6.5%	9.1%
<i>bn</i>	28.4%	59.2%	5.3%	7.1%
<i>cs</i>	37.0%	40.4%	7.5%	15.1%
<i>en</i>	52.9%	32.1%	7.2%	7.7%
<i>es</i>	52.6%	31.3%	6.0%	10.1%
<i>fa</i>	40.7%	46.2%	4.6%	8.5%
<i>fr</i>	47.7%	38.0%	6.7%	7.6%
<i>ja</i>	43.9%	44.8%	6.1%	5.2%
<i>nl</i>	43.0%	40.6%	6.2%	10.2%
<i>pl</i>	41.2%	43.7%	6.5%	8.7%
<i>pt</i>	56.1%	31.9%	5.4%	6.6%
<i>ru</i>	31.2%	53.4%	7.3%	8.1%
<i>tr</i>	43.9%	42.0%	6.8%	7.4%

<i>Project</i>	<i># unreverted IP edits / pages edited by IP</i>
Bengali	2.04
Japanese	1.98
English	1.86
French	1.65
Spanish	1.60
Russian	1.60
Portuguese	1.53
Dutch	1.38
Czech	1.29
Persian	1.26
Polish	1.17
Turkish	1.13
Arabic	.53

LEFT: A measurement of **IP edit density**, i.e., the number of unreverted IP edits divided by the number of pages edited by IP during the year 5/2020-5/2021. Note that the Japanese and Arabic continue to contrast with each other.

IP editing: *casual* vs. *strategic*

casual IP editors represent an opportunity

Casual (majority)

Strategic (minority)

editing activities

editor traits

editing activities

editor traits

typo correction, spelling,
copy editing, etc.

public/non-owned
devices

working on controversial
topics

knowledgeable and
experienced editors

occasional substantial
edits

uninterested in/unaware
of community

substantive contributions

privacy-concerned (from
other editors)

using Visual Editor

often doesn't understand
how Wikipedia works

occasional participation in
non-content page
discussions

public/non-owned devices

unmotivated to log in

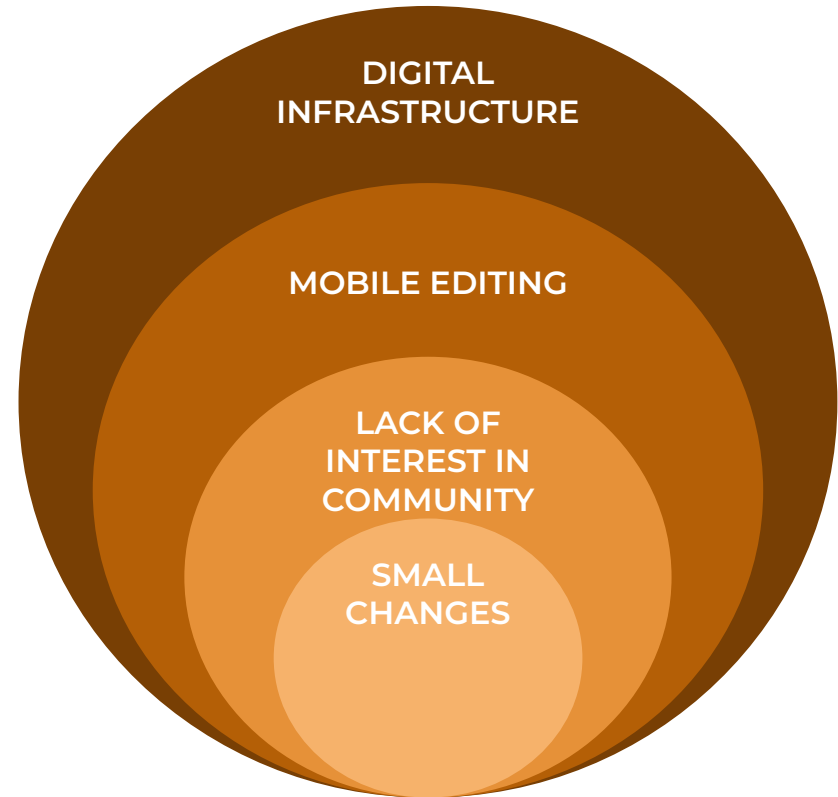
intentionally avoid
logging in

potential New Editors

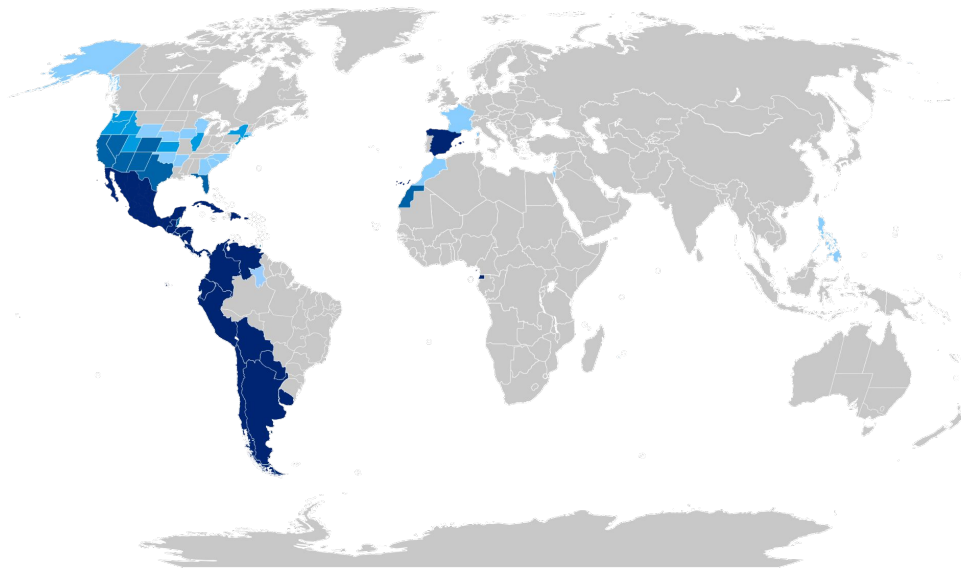
***likely already
registered***

motivations for *casual* IP editing

- **High mobile data costs**—especially in developing contexts.
- **Many lack computers at home**, and frequently use public/shared devices—reluctance to log in to accounts.
- **Functionality burden**—content creation is harder on mobile; small edits are easier.
- **Multiple devices**—editors juggle multiple devices, and some work better than others for certain non-Latinate scripts.
- **Lack of interest** in joining a new social network or online community.
- **Unaware** that minor edits constitute contribution to an existing community.
- Interest in a single, minor action.
- No plans to return or monitor edit.
- Accounts are already unnecessary for this.
- Unaware of how *easy* the Wikipedia account creation process is (e.g., no email required).



digital infrastructure gaps lead to editor gaps and incentivize *casual* IP editing



Hispanophone global world map. Map credit: [Alice Hunter \(CC BY-SA 4.0\)](https://commons.wikimedia.org/wiki/File:Hispanophone_global_world_map_language_2.svg):
https://commons.wikimedia.org/wiki/File:Hispanophone_global_world_map_language_2.svg

- Bengali editors often **juggle multiple devices**
 - interview participants reported smartphones (Android), feature phones, laptops, and desktops.
- **Editors are often from the cities**, resulting in further content gaps.
 - Central America is chronically under-represented in eswiki.
- **Content generation is harder on mobile**—limited functionalities + high data costs.
- Many editors **lack computers at home**—using shared devices is frequently described as a disincentive to logging in.

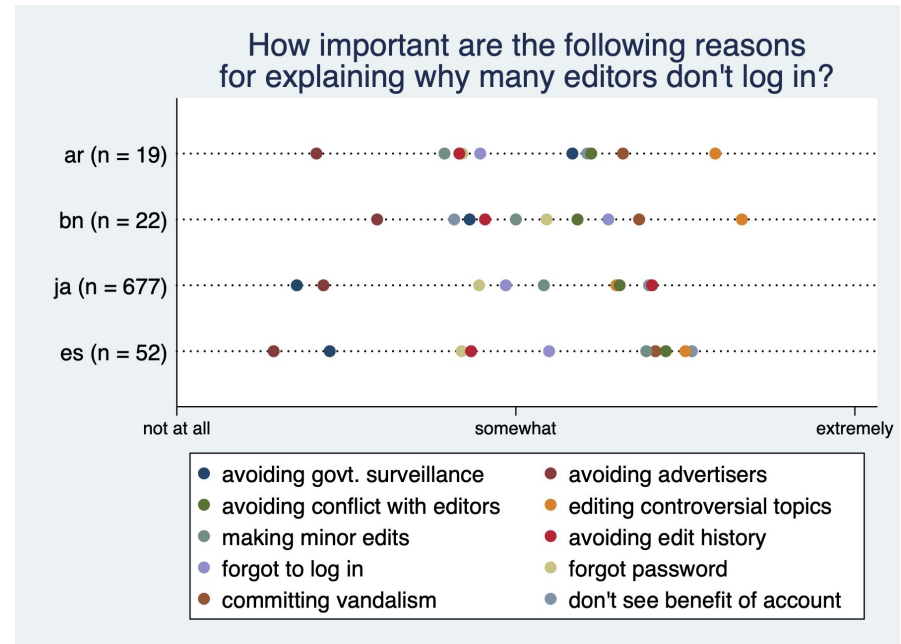
communities recognize a range of motivations for IP editing

<i>How important are the following motivations for IP editing?</i>	Spanish		Arabic		Japanese		Bengali	
	<i>mean</i>	<i>#</i>	<i>mean</i>	<i>#</i>	<i>mean</i>	<i>#</i>	<i>mean</i>	<i>#</i>
Not seeing the value in having an account (es)	2.51	52	2.21	19	2.39	680	1.82	22
Working on controversial topics (ar, bn)	2.50	50	2.59	17	2.30	675	2.67	21
Disputes with other editors	2.44	52	2.22	18	2.31	676	2.18	22
Committing vandalism	2.41	51	2.32	19	2.30	676	2.36	22
Only wanting to make minor edits	2.38	52	1.79	19	2.08	679	2.00	22
Forgot to log in	2.10	51	1.89	19	1.97	675	2.27	22
Not wanting to create a personal edit history (ja)	1.87	53	1.83	19	2.40	677	1.91	22
Forgot password	1.84	50	1.84	19	1.89	674	2.09	22
Avoiding government surveillance (ja)	1.45	51	2.17	18	1.35	678	1.86	22
Wanting to avoid advertisers (es, ar, bn)	1.29	49	1.41	17	1.43	673	1.59	22

- **most important**
- **least important**

communities recognize a range of motivations for IP editing

- Motivations may *vary in importance* between communities.
- Responding editors identify *casual*, *strategic*, and *vandalism* as important IP drivers in their communities.
- **Japanese** respondents rank *avoiding a personal edit history* as the most important.
- **Japanese** and **Spanish** respondents don't rank *government surveillance* as important, while **Arabic** respondents rank it as *somewhat important*.



meet some IP editors

casual IP editors...

- exist among Wikipedia readers in all communities;
- often don't know how easy account creation is;
- seek to make **quick** edits;
- are unaware of how Wikipedia works, and often unaware of the privacy implications of IP editing;
- often aren't interested in participating in a community at the time of editing.

strategic IP editors...

- are found in higher concentrations in communities where *the social stakes of editing* are higher (e.g., Arabic and Japanese);
- likely have an account that they log in to for *some* editing;
- specifically want to avoid many account “benefits,” such as an **edit history** and **ability to be contacted**;
- work on highly specialized and idiosyncratic topics;
- are a likely a minority of IP editors.

Huda

arwiki editor—26 years old

📍 Morocco

👤 B.A.

🌐 ar, fr, en

🎓 Teacher



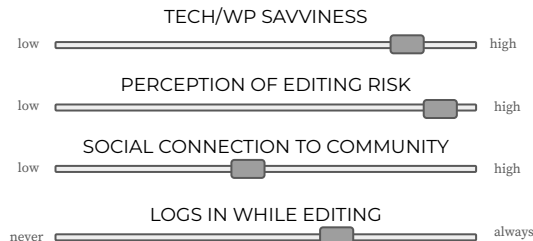
“ [If I edit a controversial topic,] people will start being more scrutinizing . . . So you can find yourself quickly in the middle of a virtual attack on your edits.

Photo credit: [Owlsmcgee \(Public domain\)](https://commons.wikimedia.org/wiki/File:Woman_2.jpg): https://commons.wikimedia.org/wiki/File:Woman_2.jpg

Strategic—avoiding harassment

Huda has been editing Arabic Wikipedia for 5 years but doesn't maintain a social Wiki network. She usually edits from her logged-in account. As she became more experienced, she noticed that editing certain topics attracts negative scrutiny that follows her to her “non-controversial edits.”

Huda enjoys occasionally improving articles about gender and sexuality, but she prioritizes avoiding hounding and harassment. She would rather risk seeing her high-quality IP edits reverted than make the same edits to controversial articles while logged in—she can always try again later and take her chances with a new reviewer.



Priorities

- Occasionally editing topics related to gender and sexuality.
- Avoiding linkage between edits to controversial topics and main, logged-in account.
- Avoiding brigading and harassment.
- Avoiding being identified as a woman editor.

Awarenesses

- Understands that IP addresses are sometimes identifiable.
- Aware that other editors have been harassed and hounded after contributing to controversial topics.

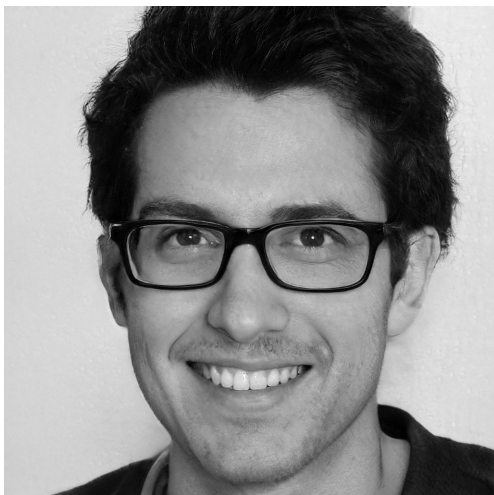
Relationships

- Is vaguely aware of network of “power editors,” but isn't interested in participating.
- Doesn't value coordination or communication with other editors.

Adel

arwiki editor—32 years old

- 📍 Spain 👤 M.A.
- 🗨️ ar, es, en ⚙️ Engineer



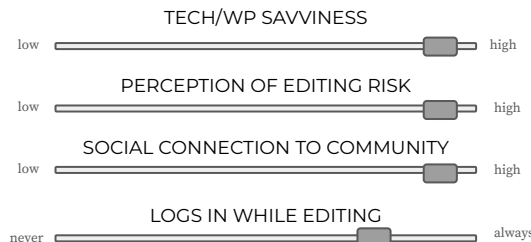
“ [Working on these topics] will likely make it difficult for me to have other interactions that are not related to these articles.

Photo credit: [Owlsmcgee \(Public domain\)](https://commons.wikimedia.org/wiki/File:Man_3.jpg): https://commons.wikimedia.org/wiki/File:Man_3.jpg

Strategic—maintaining community status

Adel is a longtime Arabic Wikipedia editor, participating actively (if intermittently) in the community since the mid 2000’s. He became more serious about editing when in college in his home country of Jordan.

Although he currently lives in Spain, he occasionally edits topics related to Jordanian politics and geopolitics, and he logs out to do so. Having maintained his editor account for over a decade, he is wary of damaging his long-curated social network within the Arabic community by becoming “known” as an activist or politically motivated editor among the population of arwiki “power editors.”



Priorities

- Edit topics related to Jordanian and Saudi geopolitics.
- Avoiding linkage between edits to controversial topics and main, logged-in account.
- Avoiding damage to social relationships among other active editors.

Awarenesses

- Understands IP address assignments.
- Knows and uses VPNs extensively.
- Has deep knowledge of community dynamics.

Relationships

- Routinely interacts with other active editors while logged in.
- Wants to continue attending conferences and affiliate meetings.
- Knows and notices editing patterns of other logged-in editors.

Victoria

eswiki editor—22 years old

- 🇳🇮 Nicaragua 👤 B.A.
- 🇪🇸 Es 🎓 Student

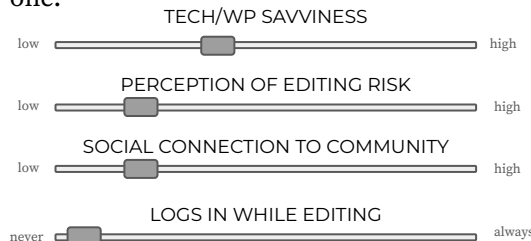


“ [IP editing] is the fastest and easiest way to correct mistakes. Thousands of weekly edits to correct simple mistakes come from IP. Creating an account and logging in just to fix a simple typographical error isn't practical.

Casual—typo correction

Victoria found herself reading Spanish Wikipedia more frequently when she began her university studies a few years ago. She is aware that Wikipedia can be edited, and she occasionally uses the Visual Editor to correct spelling, punctuation, or other minor errors.

Victoria only edits if she notices a typographic error while reading. Lacking a computer at home, she only reads while on her phone, or while working on course assignments at a local internet cafe. She is vaguely aware that Wikipedia accounts exist, but she isn't interested in creating *another* account since she already satisfies her desire to make quick edits without one.



Priorities

- Correcting punctuation, spelling, grammar, etc.
- Saving time.
- Avoiding entering personal information while on shared devices.

Awarenesses

- Can use Visual Editor, but is unaware of how it differs from the source editor.
- Unaware of edit history.
- Unaware of IP assignments and risks.

Relationships

- Is vaguely aware of the existence of a community, but is uninterested in joining.
- Doesn't follow edited pages, or even regularly verify after making changes that they have been implemented.

Alejandro

eswiki editor—18 years old

🇨🇦 Argentina

🎓 High School

🌐 es

🎓 Student



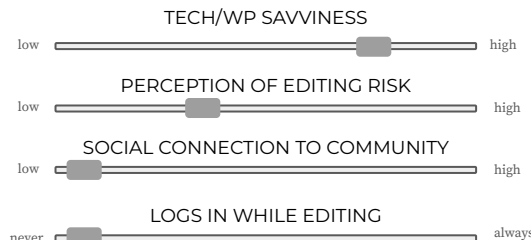
“ When some politician mentions Wikipedia in a speech, there will be a surge of vandalism in the biography of that politician. It’s 100% sure to happen.

Photo credit: [TryKid](https://commons.wikimedia.org/wiki/File:AI_generated_face.jpg): https://commons.wikimedia.org/wiki/File:AI_generated_face.jpg

Casual—vandalizing

Alejandro is a frequent Spanish Wikipedia reader and aware of the fact that Wikipedia can be edited. Having clicked the “edit” button several times over the years, he knows how to use the Visual Editor.

These days, Alejandro typically edits from his phone in connection to sports rivalry matches, and typically does so order to share screenshots of his vandalizing edits in off-Wiki spaces. He is vaguely aware that his edits are reverted, but unaware of the speed with which this happens. He suspects that his IP address is being recorded somewhere, but he isn’t concerned with the risks involved.



Priorities

- Vandalizing.
- Maintaining offline social connections.

Awarenesses

- Can use Visual Editor, but is unaware of how it differs from the source editor.
- Aware of edit history.
- Vague awareness of IP address assignments.
- Unaware that several previous vandalism sessions have resulted in his IP address being blocked.

Relationships

- All editing is done for the purpose of sharing screenshots in off-Wiki forums.

The Casual Editor

BENGALI IP EDITOR

Age, Gender: Anonymous

Location: Anonymous

Languages

Speaks - Bengali, English*

Reads - Bengali, English*

GOAL

To quickly edit small errors on Wikipedia

“ People who want to edit only once or occasionally they do not see the requirement to open an account. Such people don't have so much time and the patience to log in and edit. They are just casually browsing.

- Bengali editor on IP editing

CHALLENGES

- Unaware that they are not logged in while editing

TASKS ON WIKIPEDIA

Make quick, infrequent edits on Wikipedia mainly to correct grammar or small mistakes

STORY

The Casual Editor is an IP editor who may or may not be very experienced. They make small edits when they are casually browsing articles and if they see a minor error like a grammatical mistake. They may or may not be very frequent users of Wikipedia. Since their editing is irregular and minor, they don't see the value in creating an account. Even if they do have an account, they don't bother to check if they are logged in while editing.

*Likely, fluency unknown



The Vandal

BENGALI IP EDITOR

Age, Gender: Anonymous

Location: Anonymous

Languages

Speaks - Bengali, English*

Reads - Bengali, English*

GOAL

To spread a certain philosophy or point of view by giving biased information

To defame an article of a personality

To gain notoriety by editing an article and posting screenshots on social media

“ Suppose they don't like one idea or topic, they want to go to that topic and add something that isn't correct, that doesn't have a reference. Or they want to remove information from a page because they know that there is no way that someone can trace them back.

- Bengali editor on IP editing

CHALLENGES

- Frustrated about being targeted/ blocked or banned by other Wiki editors while editing articles.

TASKS ON WIKIPEDIA

Use IP editing for destruction of articles

STORY

The Vandal is an experienced IP editor who wants to destroy articles because they don't like the content of the article and want to promote a certain viewpoint. They often target personalities like actors or celebrities or articles on trending topics. Their work gets discussed in the community and they often get banned or blocked by the admins. To navigate this, they open another account so they can continue to edit anonymously.

*Likely, fluency unknown



The Activist

BENGALI IP EDITOR

Age, Gender: Anonymous

Location: Anonymous

Languages

Speaks - Bengali, English*

Reads - Bengali, English*

GOAL

To be anonymous while editing articles on controversial topics.

To contribute to Bengali Wikipedia by creating new articles on sensitive topics

“ In terms of controversial topics, religious topics, they (some editors) don't want to reveal the identity, which may increase the possibility of the government not liking it; they want to be anonymous.

- Bengali editor on IP editing

CHALLENGES

- Concerned about government surveillance due to their work on religious or political topics
- Concerned about edit history being public and hence being targeted by government or individuals

TASKS ON WIKIPEDIA

Edit or create articles on controversial or sensitive topics

STORY

The Activist is an IP editor who works on editing or creating new articles on controversial topics. They work mainly on religious or political topics that can catch the attention of the government or law enforcement. Usually they are experienced editors who want to contribute to Bengali Wikipedia but are afraid about the consequences of editing certain topics. The Activist want a way to continue editing anonymously as they consider this to be "good work" or constructive editing.

*Likely, fluency unknown



Mountain Mushroom. Photo credit: Sherpa Tshering, CC BY 4.0, via Wikimedia Commons: https://commons.wikimedia.org/wiki/File:Mountain_mushroom.jpg

IP editing personas identified in Japanese Wikipedia

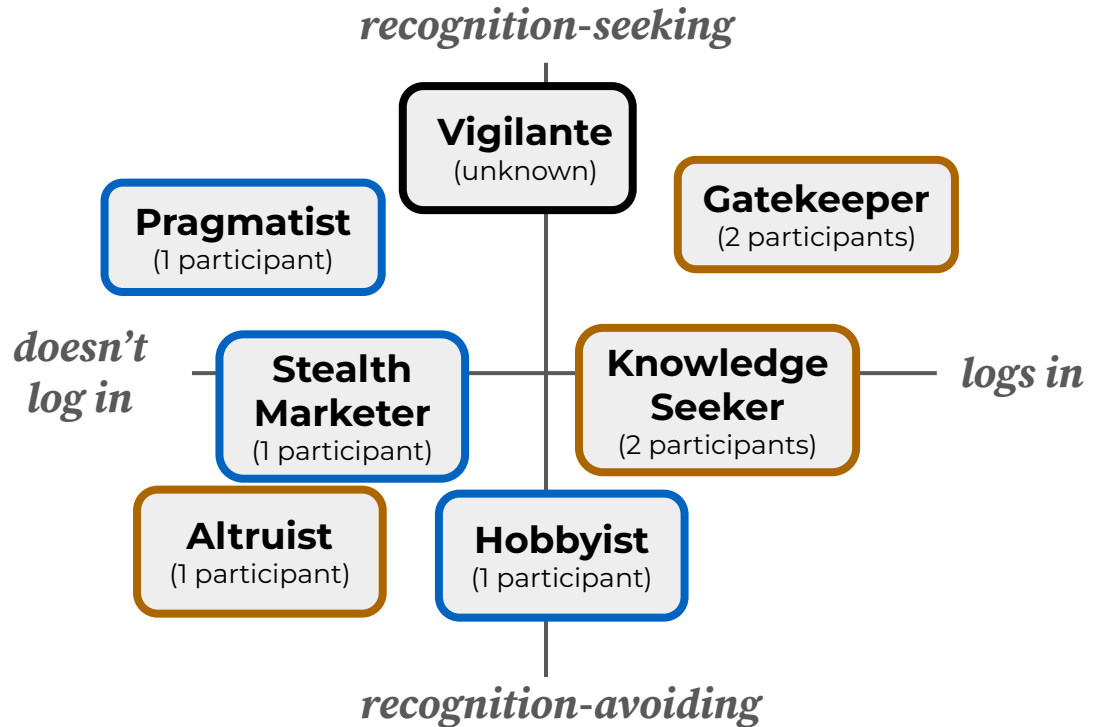
Interviewed Japanese editors fall along three axes: **seeking recognition**, **logging in**, and **participating in the community**.

Participates in community

- The Knowledge Seeker
- The Gatekeeper
- The Vigilante

Eschews community

- The Hobbyist
- The Pragmatist
- The Stealth Marketer



Yuto

jawiki editor—28 years old

🇯🇵 Japan

👤 B.A.

🇯🇵 ja

🔗 IT professional



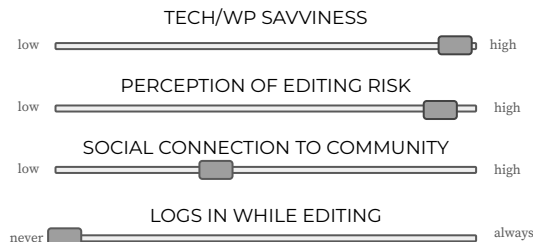
“ I was so disappointed with the result of the dispute that I stopped editing for years. I stopped caring even when the articles of my expertise were vandalized. . I never logged back in to that account.

Photo credit: [Owlsmcgee\(Public domain\)](https://commons.wikimedia.org/wiki/File:Man_1.jpg): https://commons.wikimedia.org/wiki/File:Man_1.jpg

Strategic—“the altruist”

Yuto has been editing and patrolling for over 15 years. He began by editing topics of personal expertise from his account, but after becoming involved in an acrimonious dispute, he resolved to continue editing from IP.

In this dispute, his edits were—from Yuto’s perspective—unfairly challenged and eventually removed by consensus. This unfair treatment obliterated his motivation to edit, and he took several years off. Now he edits and patrols from IP, and he doesn’t seek recognition for his anonymous work.



Priorities

- Avoiding inter-editor conflict at all cost.
- Contributing knowledge in his areas of expertise.
- Patrolling for vandalism to his topic areas.
- Remaining unidentifiable to other editors.

Awarenesses

- Understands risks associated with IP address.
- Frequent patroller.

Relationships

- Explicitly avoids interaction with other editors.
- Has no desire to form new relationships due to past disputes.

Kana

jawiki editor—28 years old

🇯🇵 Japan

👤 B.A.

🇯🇵 ja

🕒 gig worker



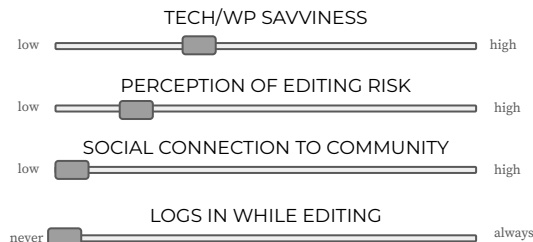
“ I’m amazed at how some people voluntarily contribute to Wikipedia. I don’t understand them. I just do it because it’s my job.

Photo credit: Qwlsmcgee(Public domain): https://commons.wikimedia.org/wiki/File:Woman_3.jpg

Strategic—“the stealth marketer”

Paid marketers were identified as a category of IP editors in Japanese and Spanish. Kana is paid to promote a product, person, or brand by creating articles and patrolling changes to them. Having a Wikipedia article about a subject is viewed as an important and valuable avenue of promotion.

Kana edits anonymously out of convenience—she doesn’t see the value of logging in for editing or patrolling her topic. IP editing is also less identifiable as paid editing.



Priorities

- Promoting a person, product, or brand via positive Wikipedia coverage.
- Quickly accomplishing her paid work.
- Patrolling for changes or vandalism to a handful of “her” articles.

Awarenesses

- Knows that she may be breaking some rules.
- Aware that her IP address may be semi-identifying, but isn’t motivated to obscure it.

Relationships

- Uninterested in participating in the community.

Kumiko

jawiki editor—32 years old

🇯🇵 Japan

👤 B.A.

🗺️ ja, en

🔗 service worker



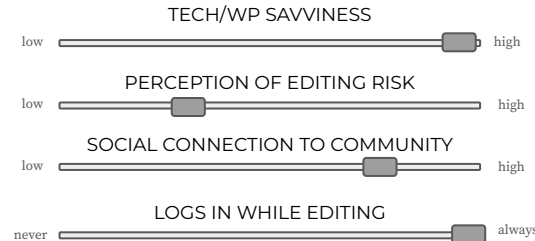
“ I admit I can be blunt. That’s because I prioritize protecting the Wikipedia policies and creating a better community over sugarcoating my words and maintaining a pleasant relationship with fellow editors.

Photo credit: [Ovylsmcgee \(Public domain\)](https://commons.wikimedia.org/wiki/File:Woman_5.jpg)
https://commons.wikimedia.org/wiki/File:Woman_5.jpg

Patroller—“The gatekeeper”

Kumiko has been editing and patrolling for over 15 years. She began by correcting errors in her field of expertise, and feels committed to keeping the community on the right track. She has caused conflict in the past by describing another editor’s statement as “a lie,” and has been called “intimidating” for sending another editor a corrective message about their work.

She takes great pride in her work, and her user page is elaborately populated with her contributions and achievements. She uses the same username across platforms, and agrees that she is essentially identifiable.



Priorities

- Combatting IP vandalism.
- Correcting “errors” in the good-faith work of other editors.
- Tracking and curating her editing and patrolling work.
- Improving the quality of Wikipedia via increased adherence to existing policies.

Awarenesses

- Highly aware of community dynamics and Wikipedia functions.
- Is aware that she is theoretically identifiable through the information disclosed across her linked pseudonymous accounts.

Relationships

- Describes self as more interested in promoting quality than in maintaining relationships.
- Views IP editors with deep suspicion and as a source of disruption and discord.

the communities

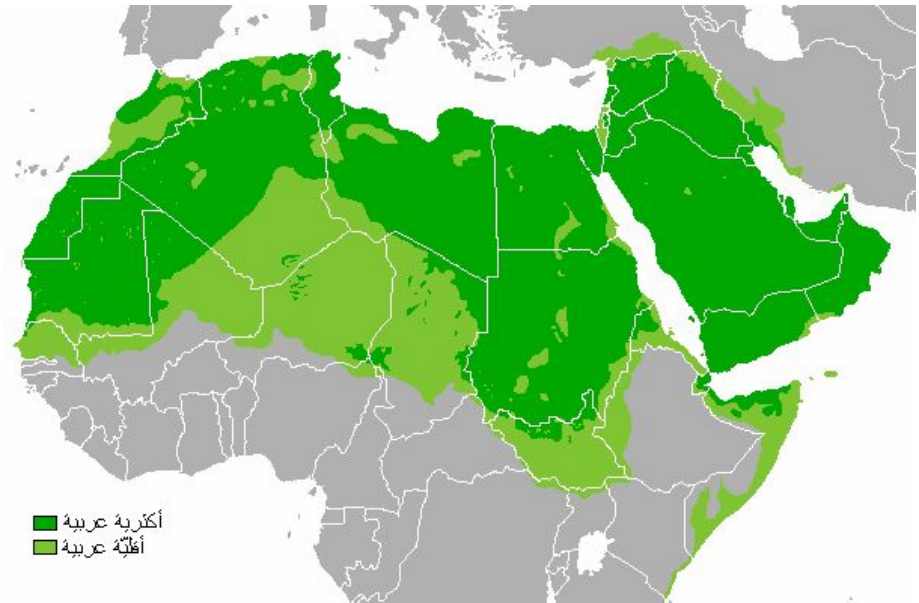
Spanish and Arabic are highly multinational Wikipedias

Harder to patrol

- Quick reversion of an IP edit often makes more sense than verifying notability.

Concentration of patrollers

- In Arabic and other multinational Wikipedias, patrollers and admins are concentrated in a few geographical regions.
- Results in content gaps and privileging of some regional perspectives over others.



Arabic majority and minority areas. Map credit: [بلد \(Free Art License 1.3\)](https://commons.wikimedia.org/wiki/File:Dispersi%C3%B3n_lengua_%C3%A1rabe-ar.png):
https://commons.wikimedia.org/wiki/File:Dispersi%C3%B3n_lengua_%C3%A1rabe-ar.png

Japanese IP editing dynamics

Frequent conflicts

- Interviewed editors describe an **occasionally antagonistic community**—heated interpersonal conflicts often occur over changes to contents.
- **IP editors often avoid conflict** by avoiding logging in, edit histories, and talk page contributions.
- “Cliques” of editors organize labor to maintain control over articles and topics.
- Some IP editors report making minor changes from their accounts, but logging out for major edits that could be contested.

Logged-in editors often distrust IP contributions

- IP editors are often seen as uncountable, unaccountable, and unreachable.
- IP editors sometimes contribute to community discussions, although rarely constructively.



Logged-in Japanese editors respond:

I don't think I've ever seen an input from an IP editor that steered the conversation in a better direction.

Fluctuating IP addresses make it more difficult for editors to communicate constructively with logged-in users.

Many editors with a certain amount of experience become self-conscious about editing because they don't want to get involved in troublesome situations.

- interviewed Japanese editors

community discussions of IP masking

Several **Arabic** and **Spanish** interview participants responded to the ongoing [IP masking initiative](#).

- Patrollers were generally supportive, but expressed apprehension about the mechanics of implementation.
- Mentors noted that New Editors often have a wide **IP knowledge gap** to bridge—*what are IP addresses, and why are they sensitive?*
- An **Arabic** [community discussion around the IP masking proposal](#):
 - Discussants are generally supportive of IP masking.
 - Discussants frequently stress the association of IP editing with vandalism and advertising.

Arabic editors discussing IP masking:

I don't understand a lot about technology, but I know that IP addresses represent a vandalism threat to us in Wikipedia, and they represent a threat of privacy violation for their owners.

As far as the Arab World goes, there are several countries that don't show the true information about a user's address or location, rather the address of a service center . . . and the IP might change from time to time.

should IP editing be restricted?

The **Japanese** discussion hasn't reached consensus, and generally reflects competition between:

- **Pro-restriction** editors primarily motivated to combat vandalism, and
- **Pro-accomodation** editors who want to continue allowing IP editors to avoid the perceived *downsides of logging in*.

Spanish community discussion about [The future of anonymous \[editors\] \(part 2\)](#):

- Some discussants describe their own *casual* IP editing.
- Some IP discussants post and receive antagonistic replies from logged-in discussants.
- Some IP discussants are accused of sockpuppetry.

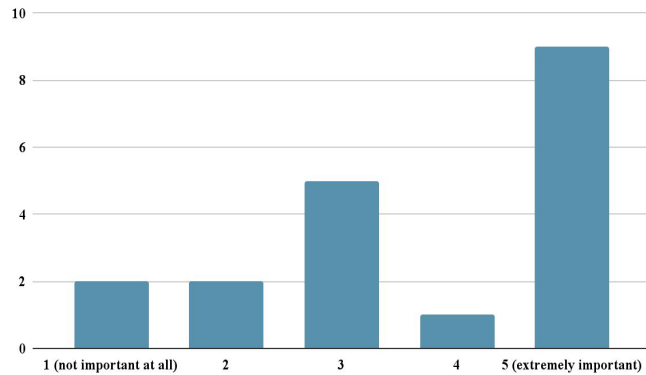
A Japanese IP editor responds:

You should know that the number of meaningful edits brought about by the function of anonymous editing is more than a thousand times greater than the number of edits made by trolls. Trolls will emerge no matter what you ban, but good-intentioned IP editors will stop contributing if logging in becomes mandatory.

- Interviewed Japanese IP editor who reports editing exclusively from IP after a past dispute.

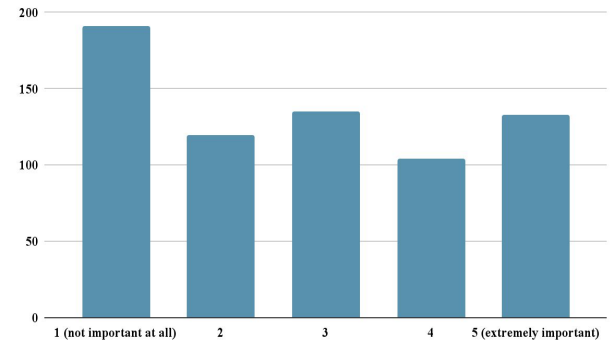
How important is it that people can edit [this language] Wikipedia without logging in?

Arabic (19)

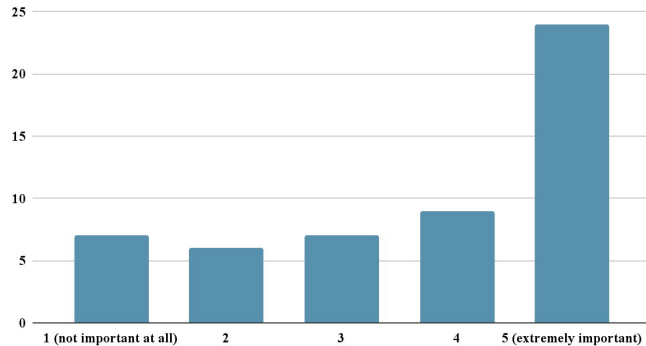


*Arabic and Spanish respondents tend to respond **extremely important**, while Japanese and Bengali respondents are more divided.*

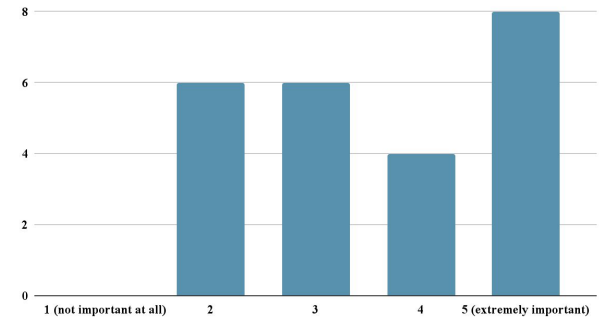
Japanese (684)



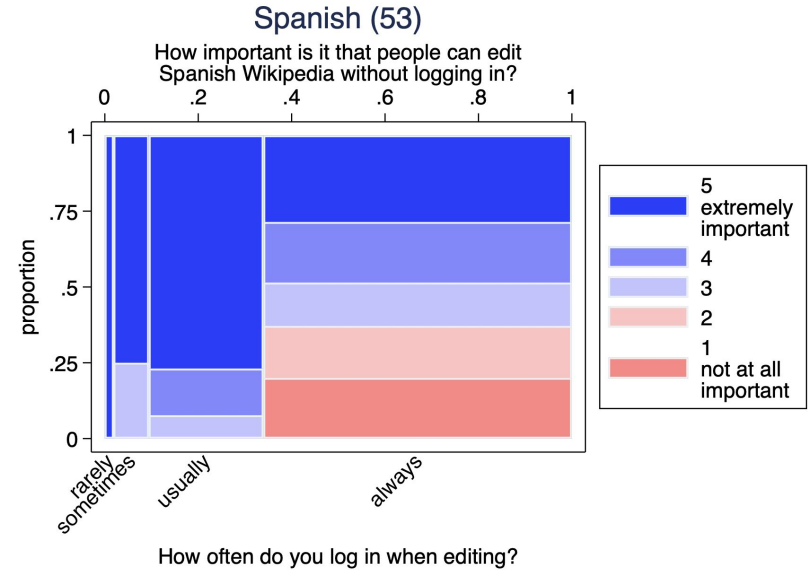
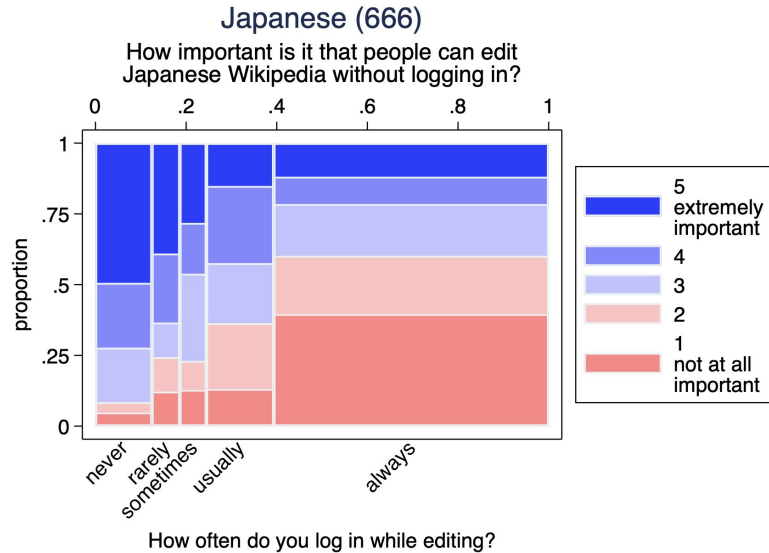
Spanish (53)



Bengali (24)



How important is it that people can edit [this language] Wikipedia without logging in?



In **Japanese** ($\rho = -.43^{***}$) and **Spanish** ($\rho = -.48^{***}$), reported *login frequency* is negatively correlated^(Spearman) with *importance of editing Wikipedia without logging in*. I.e., the *more frequently* respondents log in, the *less important* they find the ability to edit while logged out.

two schools of thought in Spanish

Pro-restriction: Technical restrictions to mitigate vandalism

- IP edits are rarely useful, and most vandalism comes from IP;
- enwiki and others are already more restrictive toward IP editing than Spanish.

Pro-accomodation: Restrictions contradict “everyone can edit”

- Many/most IP *editors* are good-faith, even if most IP *edits* are problematic;
- IP editors do valuable, low-visibility maintenance work (e.g., copy editing);
- Restriction of IP editors discourages and demotivates *potential* new editors.

Spanish editors:

When anonymous editing is open, there’s no wall or barrier. If you want to make this incorrect or vandalizing edit, or if you want to annoy people, and you have to register an account . . . it’s a first disincentive for people who want to cause damage.

I don’t know much about other Wikipedias, but I think that Spanish Wikipedia can’t function without anonymous editing.

- *Interviewed Spanish editors*



reframing “anonymity”

“anonymous” means de-linking edits from edit histories.

There is a gap between the way that editors and WMF talk about this issue.

- Anonymity-seeking editors are concerned about being identified *via* their edit history.
 - People edit local, personal-interest topics.
- Editing risks lie in potentially damaged relationships, harassment, and conflict.
- Risks grow with experience—the longer a network is cultivated, the higher the *social stakes of editing*.



Arabic editors often disclose personal information

Editor identifiability is a key component of *legitimacy* and is important for building trust between editors.

Disclosed information types

- name—full or partial
- profession
- nationality
- gender identity
- religious identity

Socio-cultural factors

- Pedigree and provenance of scholarship/knowledge
- Relationship between individual and state
- Anonymity may be seen as subversive or undesirable

Disclosure motivations

- Seeking involvement in Arabic community
- Becoming more active on Commons or sister sites
- Attending Wikimedia conferences and events
- Opportunities for employment with WMF
- Communicating with other editors in off-Wiki networks (e.g., Facebook)





For us, writing your real name strengthens the trust that others have. People tend to mistrust anonymous interlocutors. But a real name and picture provides more credibility.

...

It's personal information, but personally I think that if you didn't know that person from their social media pages or elsewhere, it's hard for you to find out more information about them.

- *Arabic editors speaking about the use of semi-identifiable usernames*

anonymity in Japan

- Interviewed editors note that anonymous volunteerism is culturally valued in Japan.
- Discussions of online anonymity invariably touch on [2Chan](#) and the aggressive toxicity popularly associated with it.
 - Newer editors may be reluctant to create accounts because online communities can be viewed as inherently hostile spaces.
 - Anonymity is noted as facilitating editors' non-aggressive conversations about controversial topics.
- Anonymity is often achieved on Wikipedia by avoiding accounts whose editing history can be linked to editors' interests and local contexts.
- Many Japanese editors seek to contribute while avoiding disputes and preempting potential conflicts.



I think the Wikipedia community is similar to 2Chan in a negative way—it's just as hostile. You can get viciously attacked for what you write.

- interviewed Japanese editor who avoids communicating with other editors



privacy

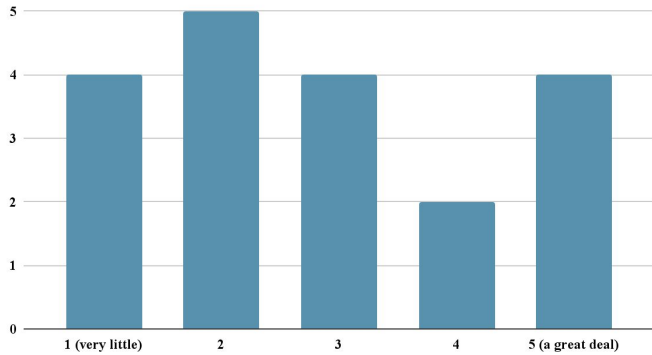
IP knowledge gap: *Casual* editors are less aware.

Editors don't fully agree about IP risks, but experienced editors are much more knowledgeable.

- IP addresses potentially reveal several types of information (e.g., device type, location, ISP, school or employer if editing from a shared device).
- *Strategic* IP editors are aware of IP risks, but
 - risks vary with geographical context (e.g., [dynamic IP assignments](#))
 - VPN use is widespread, especially in Arab countries.
- Online anonymity is an infrequent topic of community concern in Spanish and Bengali Wikipedias, but awareness is growing.
 - New editors often have “zero to no awareness” of this issue.

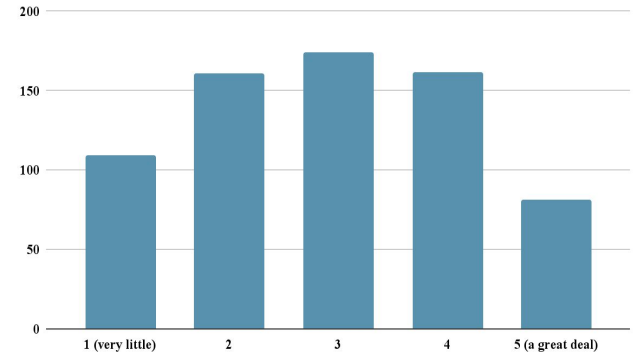
How much personal information do you think your IP address reveals about you?

Arabic (19)

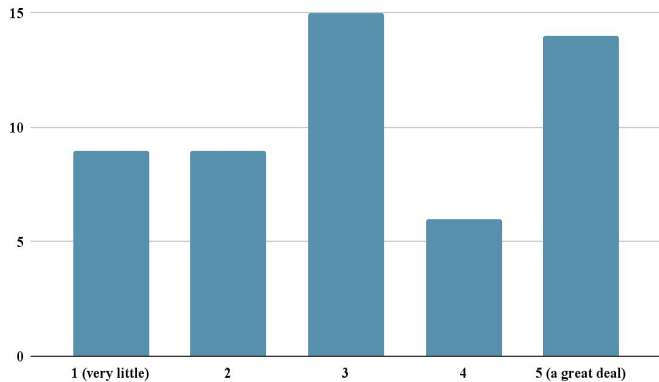


Survey respondents don't fully agree about how identifiable their IP address is.

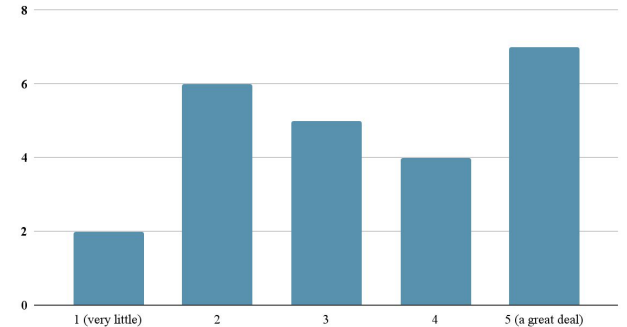
Japanese (687)



Spanish (53)

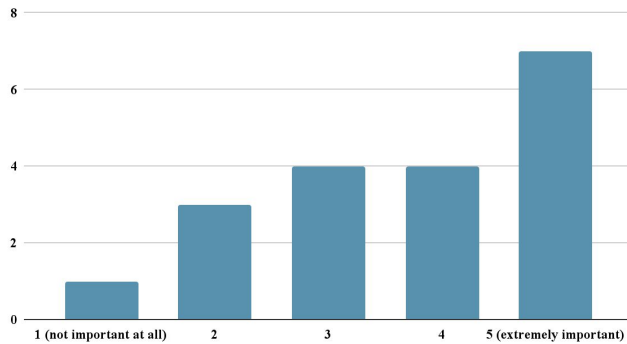


Bengali (24)



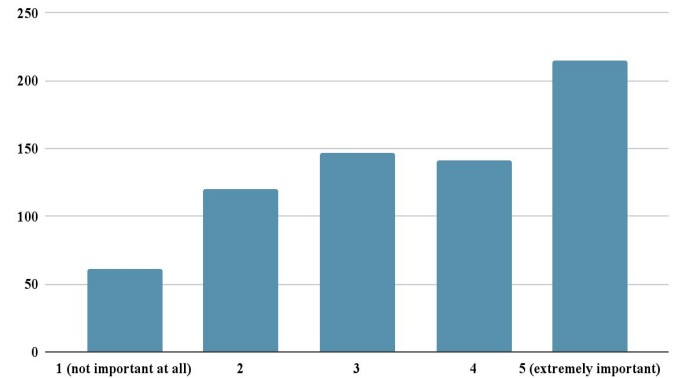
How important is it that your IP address remain hidden from others on the internet?

Arabic (19)

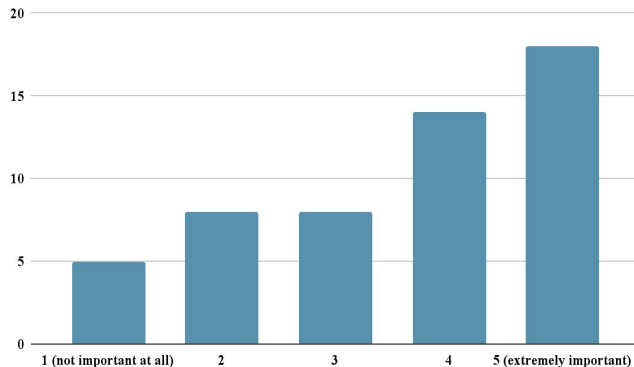


*Respondents from all communities tend to agree that their **IP addresses should remain private** from others online.*

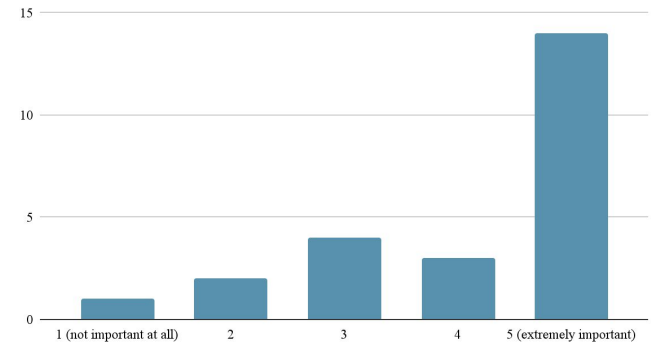
Japanese (686)



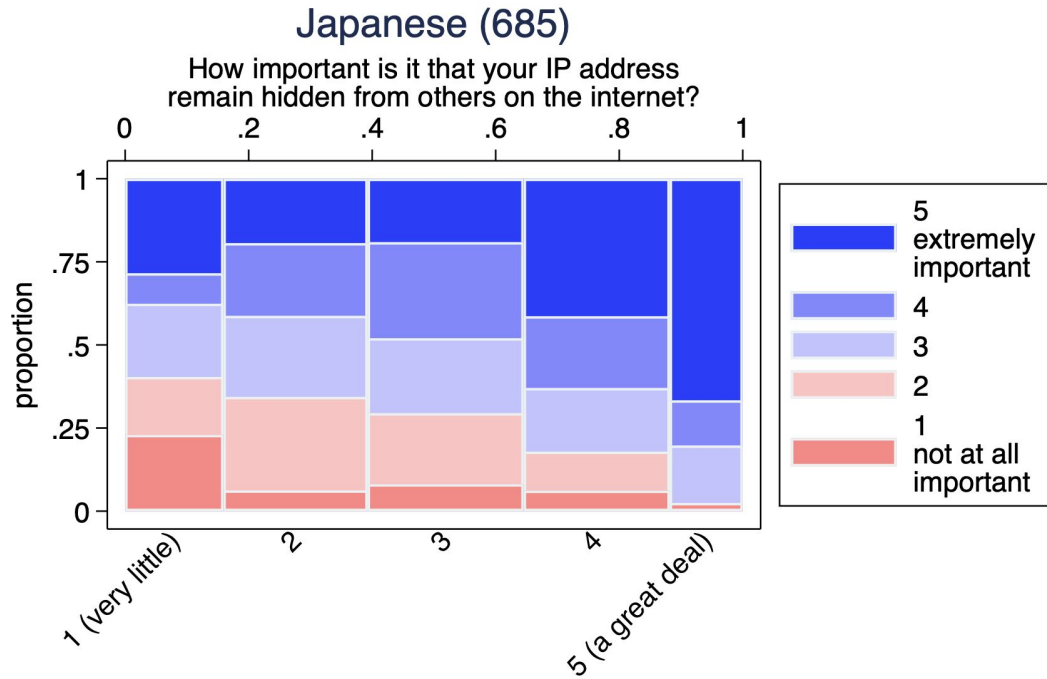
Spanish (52)



Bengali (24)



How important is it that your IP address remain hidden from others on the internet?



In **Japanese**, reported *IP risk* is positively correlated^(Spearman) with *IP privacy importance*^(rho = .30***).

That is, the more revealing Japanese respondents believe their IP address to be, the more important they tend to find it that their IP address remain private.

How much personal information do you think your IP address reveals about you?



People—in [my] society at least—don't even know what “IP” means. They're not aware of IPs and the possibility that something exists which could reveal them. Awareness of this is very limited. The people who know about these things are very rare.

...

In my case [IP editing] was out of ignorance. . . . You go, click on edit, and you don't know your IP will be shown. You edit, and that's it.

IP vandalism

where do interviewed patrollers see the most IP vandalism?

Spanish

Local (frequent vandalism)

- [Sports](#), including local teams, athletes, and rivalries (e.g., [Boca-River](#));
- [Celebrities](#);
- Political history, including conflicted terms for historical events;
- Contemporary politics and politicians, especially during electoral periods.

International (less frequent vandalism)

- Social issues such as religion, abortion, and social rights that affect the whole region;
- The naming of cities in Spain; i.e., whether to use cities' local names in local languages and dialects, or to use the formal Spanish names;
- The translation of foreign movie titles; e.g., [The Fast and the Furious](#) is referred to as *Rápido y Furioso* in Latin America, and *The Fast and the Furious: A todo Gas* in Spain.

Arabic

- Political figures, e.g., [the crown prince of Saudi Arabia](#), [Tunisian president Qays Saïd](#);
- Ongoing regional geopolitical disputes, e.g., reverted IP edits can be seen in the [Western Sahara article](#);
- Articles related to the [Arab tribes](#) and historical religious figures—IP editors are known to change information in tribal and family trees;
- Article topics relating to sexuality, gender, and non-conforming human behaviors are also noted as being frequently vandalised from IP, including [the LGBT Community](#).

where do interviewed patrollers see the most IP vandalism?

Japanese

Obvious: slander and defacement

- Topics attracting lots of readers;
- Topics associated with polarized opinions;
- Associated with celebrities and public figures;
 - e.g., the article for former Tokyo mayor [Shintaro Ishihara](#) saw the infobox image swapped for one of Kum Jong-Un.
- Topics associated with “fanatical fans,” such as Japanese train and railway articles.

Discreet: deception and harassment

- Perpetrators are mainly registered editors, including sockpuppets and throwaway accounts.
- Fixation on a particular topic or user;
- Sockpuppets of banned users enacting retaliation;
- Perpetrators are usually unidentifiable.

Bengali

- Topics attracting lots of readers;
 - e.g., topics related to the Bangladesh military may be vandalized, and the screenshots shared on social media.
- Vandals are reported to sometimes “taunt” the bnwiki community by posting screenshots to bnwiki Facebook groups.
- IP vandalism and strategic IP editing are seen in similar controversial topics.
- Celebrities and other biographies;
 - e.g., a university chancellor.
- Topics associated with social and political controversy, including religion and politics.



In Bangla Wikipedia, I focus on various things. For reviewing, I focus on any event, if there is a new event, such as events that are of public interest, there are a lot of immediate edits and new reviewers often start editing so there is misinformation so these things I delete or reject the proposal.

- interviewed Bengali patroller



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IP editors are often *talked about*, not *talked to*

How Mr de Klerk will be remembered

I am concerned that people who dislike the former president will try and vandalize the article.

— **Registered (1)**

He was a traitor and a jackal, vandalism should be permitted in this case. I will appeal to Jimbo if necessary. [\[White ethnostate\]](#) now! — **IP (1)**

‘Vandalism should be permitted’... Unpleasant and intemperate diatribe, not worthy of Wikipedia!

— **IP (2)**

@**Registered (1)**, I think the comments to your question so far from anonymous IP strongly indicates that the article will likely become a target of a level of vandalism requiring that will require [sic] some sort of vandalism protection. — **Registered (2)**

An IP interaction (later removed) on the talk page of [a controversial enwiki article](#) that occurred in November, 2021, shortly after the article subject [was in the news](#).

IP (1) directly responds to **Registered (1)**, encouraging vandalism and engaging in hate speech.

IP (2) specifically condemns call to vandalism, and frames **IP (1)** as an illegitimate community member.

Registered (2) directly responds to **Registered (1)**, and indirectly acknowledges the contributions of **IP (1)**. The community-affirming comment of **IP (2)** is unacknowledged.

Spanish patrollers identify three kinds of IP vandalism.

Innocent vandalism

Often good-faith.

Potential new editors exploring, unaware of rules and tools.

E.g., misformatting tables and references.

Regarded as an annoyance; quickly and frequently reverted by communities.

Vandalismo tonto [dumb]

Often associated with children, students, and school-associated IP ranges.

Vandalism for offline benefit (e.g., impressing friends).

Patrollers associate this with sports, memes, and other local topics that enter national discussion.

An annoyance; quickly reverted, and IPs blocked.

Dangerous vandalism

Committed by experienced, knowledgeable editors.

Intended to deceive and confuse.

Patrollers note the misrepresentation of public figures; e.g., deleting the “controversies” section.

Often associated with elections.

Much harder to detect, but much more damaging.



vandalising Wikidata

subtle subversion of article protections

- Vandalism to Wikidata is *unexpected, damaging, and accessible* to inexperienced editors.
- *Knowledgeable* vandals use Wikidata as a way to affect protected articles.
- *Casual* vandals may accept the invitation to “edit information in Wikidata” [right] without understanding the consequences.
- A limited population of Wikidata admins is asked to patrol for vandalism that potentially affects multiple Wikipedias.

Información personal	
Nombre de nacimiento	Schafik Jorge Hándal
Nacimiento	13 de octubre de 1930 Usulután, El Salvador
Fallecimiento	24 de enero de 2006 (75 años) San Salvador, El Salvador
Causa de muerte	Infarto agudo de miocardio
Sepultura	Cementerio de Los Ilustres ✎
Nacionalidad	Salvadoreña
Familia	
Padres	Giries Abdallah Hándal Giamile Hándal
Cónyuge	Tania de Hándal
Información profesional	
Ocupación	Político
Seudónimo	Comandante Simón ✎
Conflictos	Guerra civil de El Salvador ✎
Partido político	 Frente Farabundo Martí para la Liberación Nacional
[editar datos en Wikidata]	

Example of a partial Spanish [biographical infobox](#) inviting readers to “edit information in Wikidata.” (accessed 12/22/2021)



***“The best way to vandalize
Wikipedia is to change
numbers. Change numbers and
change digits, because it’s very
difficult to validate the digits
again.”***

- interviewed Spanish patroller



patrolling IP edits

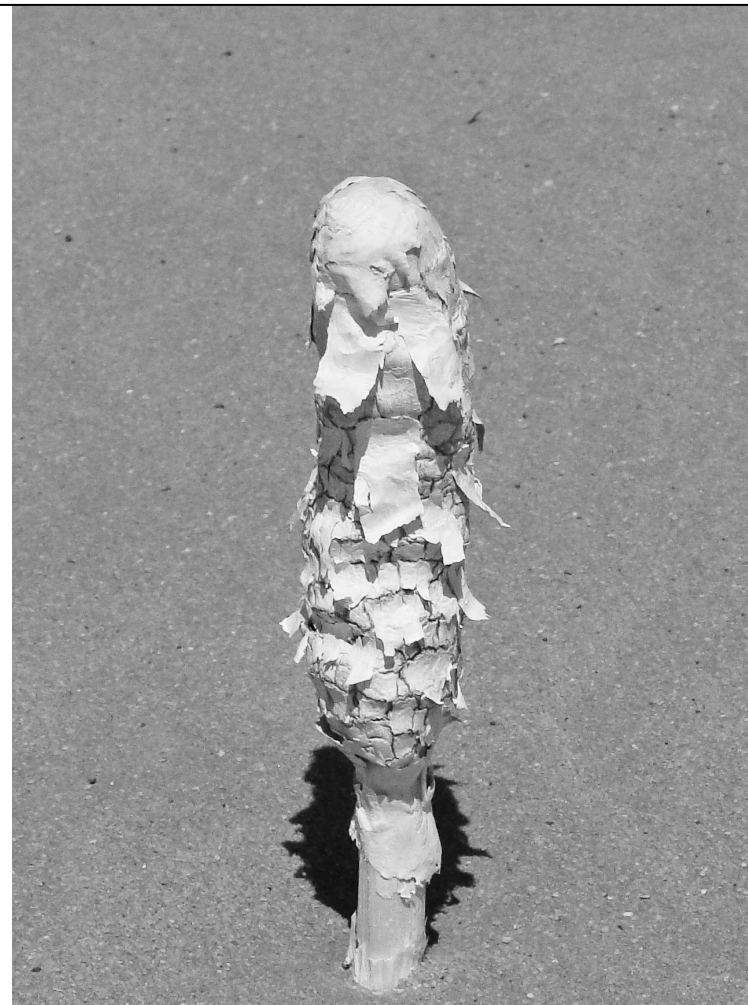
patrollers agree that most IP edits are problematic.

- Surveyed **Spanish** (19), **Arabic** (12), **Bengali** (14), and **Japanese** (282) self-identified patrollers tend to agree that *a great deal of* vandalism on their Wikipedias comes from IP.
- Patrollers in all 4 communities report scrutinizing IP and New Editors similarly, although IP appears to receive slightly more patroller attention.

However, these groups of patrollers report reverting IP edits at different rates, mirroring available metrics.



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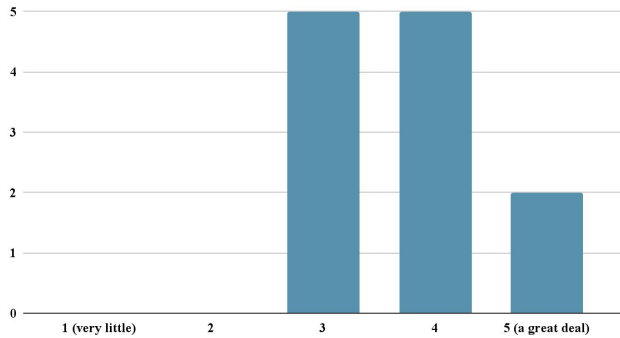


Podaxis pistillaris. Photo credit: [Bernard Gagnon](#), CC BY-SA 3.0, via Wikimedia Commons:

https://commons.wikimedia.org/wiki/File:Mushroom_in_Wadi_Rum_01.jpg

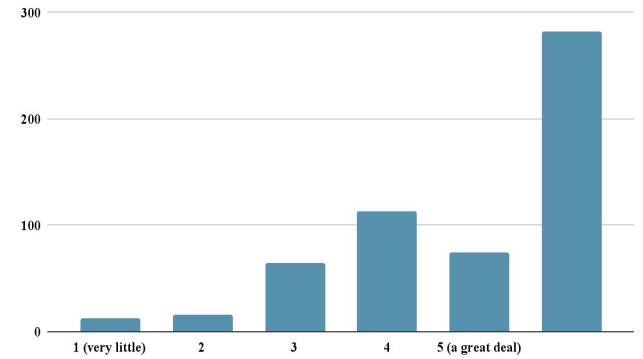
In your opinion, how much vandalism on [this language] Wikipedia comes from IP?

Arabic (12)

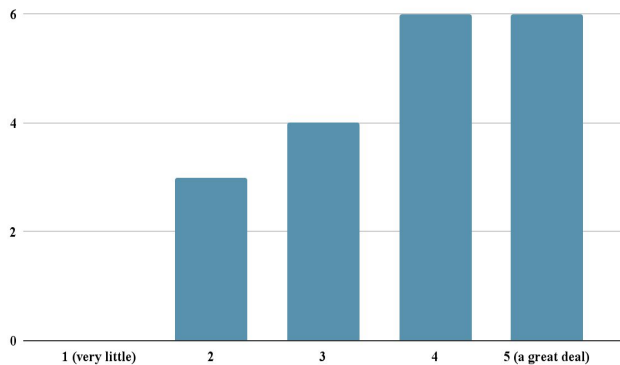


Surveyed patrollers tend to respond that relatively a great deal of vandalism comes from IP—responses skew to the right.

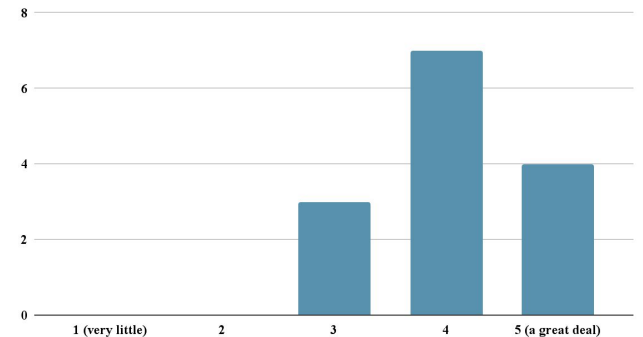
Japanese (282)



Spanish (19)



Bengali (14)





***It's very easy to revert IP edits.
The reverters don't think about
it. Who's going to complain
about it?***

...

***Many editors and patrollers
engage in an almost automatic
revision of IP edits, almost as if,
when there's an IP edit, they
click immediately on revert.***

- interviewed Arabic editors



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Spanish: Effective tools and filters

Anti-abuse filters identify possibly vandalizing edits (e.g., page or section blanking, external links, profanity, etc.) in the majority of cases.

SeroBOT identifies and reverts likely vandalism.

- relies on ORES;
- lauded by Spanish patrollers;
- regarded as overwhelmingly accurate;
- claimed to greatly reduce IP patrolling burden.

Effective tools render IP vandalism a mere “annoyance” in Spanish Wikipedia

Página del usuario [Discusión](#) [Leer](#) [Ver código](#) [Ver historial](#) [☆](#) [Salir](#)

Usuario:SeroBOT [Notificar edición errónea](#)

Este bot opera desde Toolforge (antiguo Tools Lab).
Si tienen que bloquear a este robot por su mal funcionamiento, por favor no se olviden de desactivar los **bloqueos automáticos a las IP** de este usuario o de lo contrario también estarán bloqueando a todos los demás robots que operan desde el mismo servidor.

Hola, soy SeroBOT, un bot que revierte ediciones muy posiblemente vandálicas, basándose en probabilidades, por lo que puede existir un **falso positivo**. Uso ORES como fuente de información. Actualmente estoy viviendo en Toolforge y mi código fuente está disponible en [phabricator](#) por si alguien quiere conocerme mejor.

Mi controlador actual es [Superzerocool](#) ([disc.](#) · [contr.](#)).

También estoy funcionando en [Wikilibros](#).

En la prensa

- [Funcionario de la Segegob editó la definición de lucro en Wikipedia](#)

SeroBOT [?](#)

Bor (cuenta para ediciones automáticas)

Controlador	Superzerocool (disc.)
Ediciones	1 522 319
Registrado	19 de abril de 2018 (1391 días)
Autorizado	9 de mayo de 2018 (1371 días)
Flag de bot	✓ Si
Tareas	Reversiones de vandalismos usando ORES
Programación	pywikibot
Ediciones/día	1093,62

Asistencia técnica IRC

[Notificar error](#) [?](#)

Arabic: *Flagged Revisions* increases the IP patrolling burden

- [FR/Pending Changes](#) mandates that IP and New Editor edits receive scrutiny from a limited population of patrollers.
 - Identified as a driver of Arabic's high IP revert rates by interviewed patrollers.
- Arabic New Editors are also scrutinized (and reverted) at higher rates than in other Wikis.
 - Quick reversion “breaks their enthusiasm for publishing” (*interviewed Arabic editor*).
- [Recent research](#) indicates that FR is associated with a decrease in IP edits in the Wikis that have adopted it, but editor retention, overall edit quality, and overall edit volume were relatively unaffected.

Restrictions to IP editing are potential barriers to New Editors, as well.





When you're an [established] editor, you can write about anything and people won't delete it. You can do anything you want and it won't be deleted. Admins focus on beginners and IP addresses.

- *interviewed Arabic editor*

Auricularia auricula-judae. Photo credit: [Dominicus Johannes Bergsma, CC BY 4.0](https://commons.wikimedia.org/wiki/File:Echt_judasoor_(Auricularia_auricula-judae,_synoniem,_Hirneola_auricula-judae)_bedekt_met_rijp._Locatie,_Natuurterrein_De_Fam_berhorst_01.jpg), via Wikimedia Commons:
[https://commons.wikimedia.org/wiki/File:Echt_judasoor_\(Auricularia_auricula-judae,_synoniem,_Hirneola_auricula-judae\)_bedekt_met_rijp._Locatie,_Natuurterrein_De_Fam_berhorst_01.jpg](https://commons.wikimedia.org/wiki/File:Echt_judasoor_(Auricularia_auricula-judae,_synoniem,_Hirneola_auricula-judae)_bedekt_met_rijp._Locatie,_Natuurterrein_De_Fam_berhorst_01.jpg)

Japanese: a few admins are asked to mediate a large volume of abuse

Obvious vandalism is quickly resolved

- Most cases are resolved by patrollers and editors.
- Admins may protect an article and block IP addresses.

Discrete vandalism and abuse are harder to address

- A small group of admins is asked to mediate a relatively large amount of abuse.
- Editors are often unaware of how to address or resolve abuse, and perceive dispute resolution mechanisms to be slow-moving.
- New admins are slow to come—it's sometimes prohibitively difficult and time-consuming to achieve a sufficient level of community trust to become an admin.
- Admins often become resented by editors due to the nature of their work.



Bengali: Patrollers review the edit, not the editor

Effective tools for patrolling IP (*vandalism*) and new editors (*Wikipedia-naive*):

- *Global Rollback Access*
- *Javascript*
- *Twinkle*
- *User Script*
- *SWViewer*
- *Various filters*

Patrollers may focus on specific topics (*controversial*) or error types (*copyright*).

In Bengali Wikipedia, there is a section called recent pages. I can look at real-time edits, and I use a filter that filters all the IP edits and new editors; I remove the experienced editors from that filter and only look at the IP edits and new edits. That's when I look at what real-time changes they have made, and I focus on them, and there is a web app called SWviewer where I can look at multiple domains, the real-time edits.

- *interviewed Bengali patroller*

opportunity areas

opportunity areas

Focus on *casual* IP editors

Strategic IP editors are already registered.

Don't know how easy account creation is.

Seeking ***quick editing***; often uninterested in community at first.

Unaware of IP risks.

Exist in all communities.

Reframing “anonymity”

Opportunity for improved communications.

Editors perceive risk in other editors, rather than IP disclosure.

Risk perception varies greatly between editors.

The *social stakes of editing* vary with community and editor tenure.

Tools and rules

Consult communities about effective tools—*effectiveness mediates IP reception*.

Focus on minor edits

Valued by communities.

Lower stakes than content creation for *casual* editors.

Opportunities for using proven filters?

استراحة

pausa

休憩

বিরতি

[pause]

Questions?

mraish@wikimedia.org